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BEDE AND THE COSMOS

THEOLOGY AND NATURE IN THE EIGHTH CENTURY

Eoghan Ahern

ROUTLEDGE

Bede and the Cosmos

Bede and the Cosmos examines Bede's cosmology—his understanding of the universe and its laws. It explores his ideas regarding both the structure and mechanics of the created world, and the relationship of that world to its Creator. Beginning with *On the Nature of Things* and moving on to survey his writings in other genres, it demonstrates the key role that natural philosophy played in shaping Bede's worldview and explores the ramifications that this had on his cultural, theological and historical thought. From questions about angelic bodies and the destruction of the world at judgement day to subtle arguments about free will and the meaning of history, Bede's fascinating and unique engagement with the natural world is explored in this comprehensive study.

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Bede and the Cosmos

Theology and Nature in the Eighth Century

Eoghan Ahern



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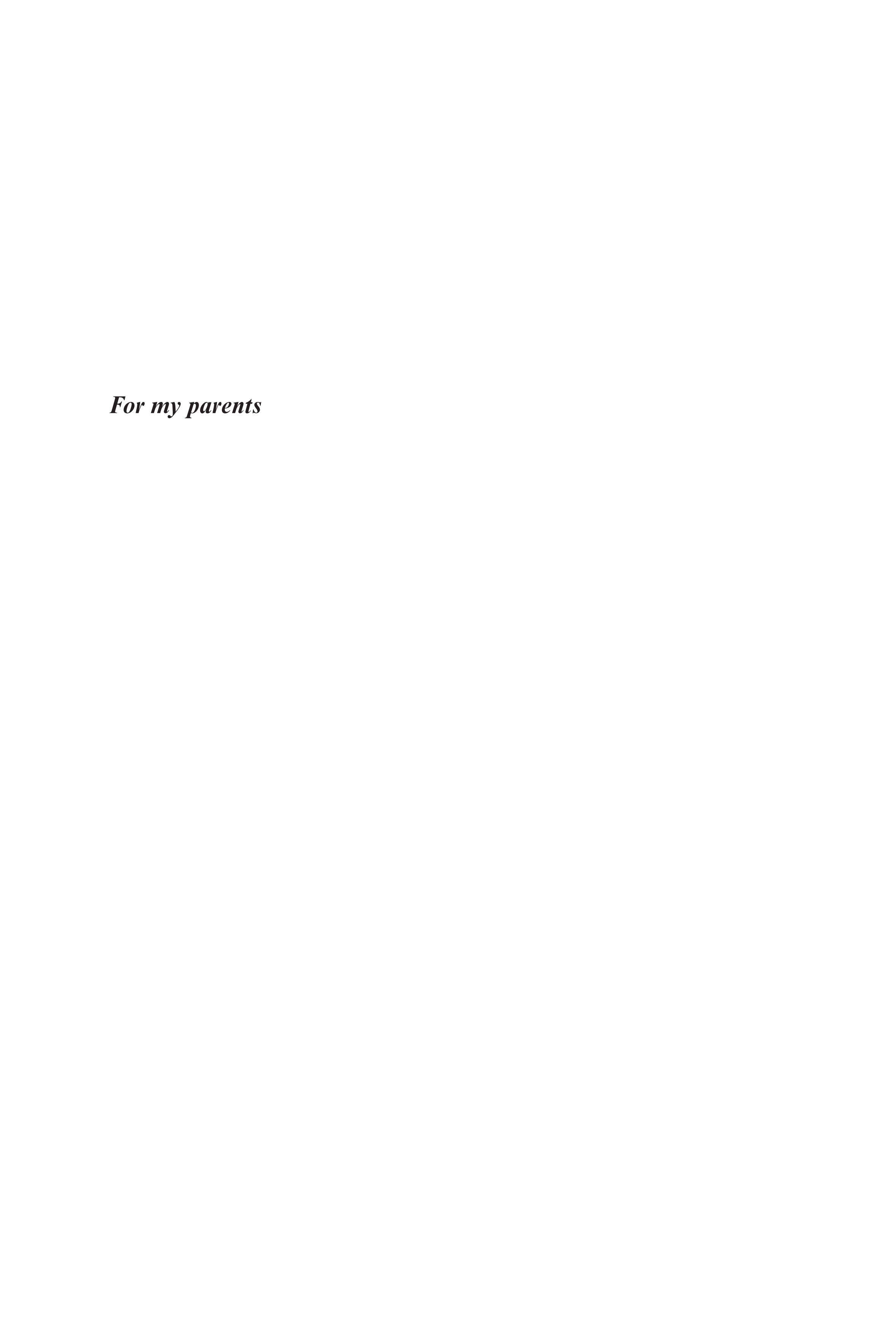
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Abbreviations

Augustine, *DCD*	Augustine, *De ciuitate Dei*
Augustine, *DGAL*	Augustine, *De Genesi ad litteram*
Bede, *DDI*	Bede, *De die iudicii*
Bede, *DNR*	Bede, *De natura rerum*
Bede, *DSET*	Bede, *De schematibus et tropis*
Bede, *DT*	Bede, *De temporibus*
Bede, *DTR*	Bede, *De temporum ratione*
Bede, *EA*	Bede, *Expositio Apocalypseos*
Bede, *HA*	Bede, *Historia abbatum*
Bede, *HE*	Bede, *Historia ecclesiastica gentis Anglorum*
Bede, *IESC*	Bede, *In epistulas septem catholicas*
Bede, *IG*	Bede, *In Genesim*
Bede, *VCM*	Bede, *Vita sancti Cuthberti metrica*
Bede, *VCP*	Bede, *Vita sancti Cuthberti prosaica*
Bede, *VF*	Bede, *Vita sancti Felicis*
CCSL	Corpus Christianorum Series Latina
CSEL	Corpus Scriptorum Ecclesiasticorum Latinorum
DOC	*De ordine creaturarum.*
MGH	Monumenta Germaniae Historica
Pliny, *NH*	Pliny, *Naturalis historia*
SC	Sources chrétiennes
VCA	*Vita sancti Cuthberti auctore anonymo*


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1 Background and context

Bede spent his life in the pursuit of learning. Born somewhere in the region of the monastery of Wearmouth-Jarrow in the kingdom of Northumbria in north-eastern Britain, he was given by his relatives into the care of that monastery at the age of seven. 'From that point on', as he would later put it, 'I devoted myself to the contemplation of the Scriptures, and, in between the observance of regular discipline and the daily task of singing in church, I always held it a delight to learn or to teach or to write'.[1] His fame in the modern day is mostly derived from his having authored the *Historia ecclesiastica gentis Anglorum* ('The Ecclesiastical History of the English People'), a magisterial work that is still our best source for early medieval British history, but he was a productive writer in many other genres as well. By the time of his death, on the 26th of May 735, he had produced over 40 separate works, among them commentaries on Scripture; *uitae* of holy men; treatises on time reckoning and on the makeup of the universe; handbooks of grammar, orthography and rhetoric; a guide to the Holy Land; and numerous letters to his contemporaries in the Northumbrian Church. According to one witness, he was working on two further projects—an English translation of the Gospel of John and a selection of the writings of Isidore of Seville—at the time of his death.[2] Most of his writings have survived into the present day, and there are few early medieval figures for whom we have comparably rich bodies of primary material. Bede's importance to the historian of ideas lies partly in this productivity, which allows us to trace particular ideas or beliefs across texts, genres and spans of time.

The present study is concerned with Bede's cosmology—that is to say, his knowledge of the structure and mechanics of the created world and of the relationship of that world to the Creator. This focus may require some words of explanation as, at first glance, such subject matter does not appear particularly prominent in Bede's corpus of writings. Early in his career, when he was only 30 years old, Bede composed a short work entitled *De natura rerum* ('On the Nature of Things') which provided a straightforward and clearly written overview of the structure of the cosmos as Bede understood it. After that, however, he never dedicated another work to this subject; for the next three decades, he concentrated on the production of

exegetical commentaries, histories, hagiographies and texts in other genres. One short work from the beginning of Bede's writing career does not, then, immediately suggest itself as an essential component of his oeuvre. Furthermore, although Bede has been of some interest to scholars exploring the medieval history of science and philosophy, this has been more for his mathematical and computistical achievements than for his understanding of what we might call physics or biology.[3] As this book will demonstrate, however, *De natura rerum* was only the beginning of Bede's interest in questions about nature, physics and cosmology. Again and again over the course of his career he returned to the themes and preoccupations that he had first approached in that early work—and much of his exegetical, historical and theological thinking was shaped by his understanding of the cosmos and of the way it operated. *De natura rerum*, and the cosmological schema so clearly laid out in its pages, is not then a dispensable piece of juvenilia but the key to an entire facet of Bede's thought.

It is worth noting, at the outset, some issues of terminology. When modern scholars discuss the picture of the cosmos depicted in *De natura rerum*, they often do so under the heading 'science'. However, this modern term has no direct counterpart in the early medieval period.[4] *De natura rerum* contains much material that a modern audience might categorize as science but also much that might instead be assigned to the realms of theology, history, biblical criticism or moral instruction. This generic inexactitude has not escaped the notice of scholars. Faith Wallis, in particular, has discussed the difficulties in delineating the exact boundaries of Bede's 'science', a category 'both uncertain in its boundaries and unclear in its definition'.[5] One important aspect of Bede's worldview onto which we must be careful not to project modern assumptions is the division between the material and the spiritual. The dualistic break between physical and metaphysical realities might seem to us a self-evident division, but the clear conceptual break between these two realities is a product of the early modern period.[6] All cosmological texts from the early medieval period deal with the spiritual realms to some extent (Bede devoted a number of chapters of *De natura rerum* to the heavenly realms) and, as we shall see in Chapters 4–7 of this book, the divide between the corporeal and the spiritual was a porous one.

The present study, then, will touch upon ideas and beliefs that might be grouped with scientific thought (specifically the geocentric, elemental model of the universe inherited by early medieval Christianity from Graeco-Roman philosophy); other topics that cross over with religious or theological understanding (such as heaven and hell, angels and demons, the soul and God); and moral or ethical ideas (such as the reading of meaning into human history and belief in a Last Judgement). For this reason I have elected to avoid the term 'science', preferring instead 'cosmology',[7] in the sense that this term is used by anthropologists: a set of beliefs and explanations related to the origins, laws, mechanisms and overall moral meaning of the universe, as well as the role and meaning of human life within this framework

(I will also make use of the further terminological sub-divisions 'cosmography', to refer to the spatial layout of the universe, and 'cosmogony', to refer to the beginnings of the universe).[8] This definition of cosmology encompasses theology, providing for theories of the universe that apprehend a divine purpose to the cosmos or that understand the universe to be the product of a Creator. It also differs from science in that it incorporates not only understandings of the mechanical aspects of nature and physics but also the moral and ethical values that are implied by—or deeply interwoven with—said understandings.[9] The cosmos which will be the focus of this book comprises both corporeal and incorporeal realities, as well as matters of moral and religious character that would be quite alien to the work of a modern scientist.

Bede's world: Wearmouth-Jarrow, Northumbria and beyond

Bede lived and worked in the twin-monastery of Wearmouth-Jarrow in the kingdom of Northumbria. Wearmouth, founded in 674 by Benedict Biscop, and Jarrow, founded in 681 or 682 by Ceolfrith, had been brought together in the late seventh century under Biscop and Ceolfrith's co-abbacy.[10] The two sites were closely situated—barely 7 miles separated them—and we do not, in fact, know in which location Bede himself was based or whether he moved frequently between the two. The surrounding kingdom of Northumbria was a relatively recent invention, the result of the political consolidation of two kingdoms—Bernicia in the north and Deira in the south—which had been incorporated under one king.[11] The kingdom was officially Christian, as indeed were its neighbours to the north, west and south; we might question to what extent this had percolated down to the general populace, but the world in which Bede grew up was a self-consciously Christian one and the Church was the dominant force in his life, education and worldview.[12] Though Bede and his contemporaries presented Northumbria as a land at the far reaches of the world, and Wearmouth-Jarrow as a secluded centre of contemplation, we should not be fooled: he moved in a cosmopolitan and affluent world with links to monastic foundations all over the Insular world and the continent, stretching as far as Rome.[13]

The figure of Bede so dominates the intellectual landscape of early-eighth-century Northumbria that, from a distance, it can appear that he sprang from nothing, but it is clear that Wearmouth-Jarrow was home to a vibrant scholarly community of which Bede was only a part.[14] Those who Bede described as his teachers—Biscop, Ceolfrith and Trumberht—were surely responsible for shaping Bede's remarkable erudition.[15] Certainly Ceolfrith, to whom Bede was clearly especially close, was a formidable intellectual force—the evidence of his letter to the Pictish king, Nechtan, speaks to a keen mind and a clear inspiration for Bede's own learned activities.[16] One of Ceolfrith's most lasting cultural accomplishments was the production at Wearmouth-Jarrow of three great pandects, one of which,

the Codex Amiatinus, was intended as a gift for St. Peter's in Rome from an 'abbot of the farthest reaches of the English' (*Anglorum extremis de finibus abbas*)[17]; the Codex Amiatinus is an astonishing production—an accomplished and confident display of the twin-monastery's Latinity and sophistication.[18] Other brothers of the monastery—Witmer, Bede's pupil Cuthbert, the anonymous author of the *Vita s. Ceolfridi*—were clearly learned and capable men. Hwætberht, the abbot of Wearmouth-Jarrow during the last decades of Bede's life, was the author of a letter to Pope Gregory II and may also be the 'Eusebius' who wrote several *Enigmata* with learned references to computus and the creed.[19] We can be sure that Bede had regular conversations about matters both rarefied and mundane with his fellow monks in Wearmouth-Jarrow. We can imagine him testing his theories on Hwætberht—to whom he dedicated his *De temporum ratione* and who, as Kendall has noted, must have been his contemporary[20]—or on his students. Biscop, Ceolfrith and Hwætberht had all travelled as far as Rome (as, presumably, had many other residents of the monastery) and may have served as sources of information on topics such as, say, volcanoes, which Bede can never have seen with his own eyes.[21] Life in Wearmouth-Jarrow certainly impacted Bede's cosmology in other ways. In a famous passage in his *De temporum ratione* he explained the relationship of the sun and the moon by analogy with lamps hanging from the ceiling of a large room; the language is evocative and must surely have been drawn from real life:

> *intrabis noctu in aliquam domum pergrandem, certe ecclesiam, longitudine latitudine et altitudine praestantem, et innumera lucernarum ardentium copia pro illius cuius natalis est martyris honore repletam. Inter quas duae maximae ac mirandi operis fari suis quaeque suspensae ad laquearia catenis, sed quae tibi ex his intranti uicinior ipsa quoque est subiacenti pauimento uicinior … ubi faribus appropinquare incipiens recto intuitu oculos ad faros et per faros ad contraposita laqueariorum uel parietis loca sustuleris, illa tibi altior quae uicinior est farus apparebit; et quanto accesseris, tanto tibi quae submersior est uidebitur esse suspensior, donec perspecta certius ueritate cuncta ut sunt posita cognoscas. Ita ergo et nos, infra duo magna caeli luminaria siti, quia utrumque habemus ad meridiem quo hoc quod inferius est in septentrionem se subrigendo magis magis que nobis appropiat, eo nobis oculos ad illa et per illa dirigentibus ad caelum, uidetur esse illo sublimius quod deiectius incedere manifesta ratione patebit.*
>
> At night-time, you go into a very large hall, or better, a church, immense in its length, breadth and height, and ablaze with countless lamps burning in honour of a martyr's feastday. Amongst these are two very large lamps of marvellous workmanship, hanging by chains from the ceiling, but the one which is nearer to you when you enter is also closer to the floor … as you start to advance towards the lamps, looking straight at them, and beyond them towards the ceiling or opposite walls, the lamp

> which is nearer appears higher to you. The closer you approach, the higher up will the one which is lower appear to you, until, by a more evident truth, you see where they are all positioned. So likewise we, situated beneath the two great luminaries of heaven, see them both at the meridian in such a way that the one which is lower, in rising further and further to the north, seems ever higher and higher, and as we train our eyes upon them and through them to the heavens, the one which, by obvious reason, is patently riding lower down appears to be higher than the other.[22]

Most importantly for Bede's intellectual development, Biscop and Ceolfrith had left the twin-monastery with an impressive library, gathered, so Bede wrote, over the course of their many trips to Rome. These trips were recounted in Bede's *Historia abbatum*: on one occasion, according to Bede, Biscop 'brought back no small amount of books that had either been bought at a fair price or given as a gift by friends'[23]; on another, he returned 'laden down' (*cumulatus*) with, amongst other goods, 'a countless number of books of every sort' (*innumerabilis librorum omnis generis copia*).[24] The Wearmouth-Jarrow library was a sizeable one (clearly one of the best in Britain at the time), but we should be careful not to overstate its extent; it has been estimated that Bede had access to no more than 200 separate works.[25] Scholarship of the past few decades has shed substantial light on what these works might have been.[26] The biggest strength of the library lay in the realm of patristic literature: for the purposes of this study, it is sufficient to note that Bede was able to draw on Augustine's commentaries on Genesis, the *Confessio, De ciuitate Dei* and many of his sermons and letters; Gregory the Great's *Moralia*, *Dialogi* and *Homiliae*; Jerome's commentaries on various books of the Old Testament and on the Gospel of Matthew; the hexaemeral treatises of Basil and Ambrose; and the apocalyptic commentaries of Primasius, Victorinus and Tyconius. Outside of the writings of the Church Fathers, he also had access to a variety of works: the histories and chronicles of Jerome, Rufinus, Orosius and Gregory of Tours; the Christian poetry of late antique writers like Claudius Marius Victorius and Avitus of Vienne; a considerable number of *uitae* and *Passiones* of the saints; the writings of the first-century Jewish writer Josephus; Vegetius's *De rei militaris*; and the encyclopaedic *Naturalis historia* of Pliny—a hugely important influence on Bede's developing cosmology. He also had a variety of texts by Isidore, the sixth-century bishop of Seville, including the extremely influential *Etymologiae* and, importantly, *De natura rerum*, another key influence on Bede's understanding of the cosmos, as we shall see. Finally, we should also note the distinct possibility that Bede had access to a collection (or collections) of glosses on the Psalms, an extremely common kind of text across Latin Europe in the early middle ages.[27]

Of course, when we talk about Bede's library we must bear in mind that his research brought him outside the environs of Wearmouth and Jarrow to some of the other monasteries of northern Britain.[28] In his letter to

Ecgberht, he mentioned '[staying] for some days with you in your monastery for the purpose of study'.[29] We know from another letter of Bede that he travelled at some point to Wicthed's monastery[30]; given that the letter 'assumes Wicthed's ability to follow a complex series of references to existing authorship' we can safely assume that Wicthed had access to a well-stocked library.[31] According to his letter to Pleguine, Bede once personally showed a copy of *De temporibus* to a monk of Pleguine's monastery.[32] We also know from the preface to the *Historia ecclesiastica* and from the *Epistula ad Albinum*—as well as from the many prefaces and dedicatory messages attached to manuscript copies of his works—that Bede was possessed of a formidable network of sources and learned contacts in the monasteries of Britain.[33] In the process of gathering information for his *Historia*, Bede spoke to or corresponded with Bishop Wilfrid of Hexham[34]; Wilfrid's successor, Acca; Bishop Daniel of Winchester in Wessex; Abbot Esi of East Anglia; Bishop Cyneberht of Lindsey; some (unnamed) brothers of the monastery at Lastingham in Deira; and with Abbot Albinus and the priest Nothhelm (later archbishop of Canterbury) in Kent.[35] It seems likely that such contacts also provided Bede with copies of important texts. Certainly, we know that Nothhelm travelled to Rome and, on the advice of Albinus, made copies of the papal letters that Bede used to such great effect in the *Historia*.[36] Albinus is also likely to have been the source for Bede's glossed copy of Gildas's *De excidio et conquestu Britanniae*.[37] Bede did not mention them in the *Historia* (given that he was concerned there with listing his sources for the history of the *gens Anglorum*), but he also had contact with Irish monastic foundations (that is, monasteries in the Irish-speaking world, which comprised both Argyll and the Inner Hebrides in north-western Britain as well as the island of Ireland). It is likely that an Irish contact, for instance, supplied Bede with a summary of a letter written to the Irish bishops from Pope Honorius, and a partial copy of another letter from a group of Roman clerics including the future Pope John IV.[38] Adomnán, abbot of Iona from 679 to 704, visited Northumbria twice in the 680s; he brought with him a copy of his work *De locis sanctis* ('On the Holy Places') which so pleased the Northumbrian king, Aldfrith, that he distributed copies to the monasteries of his kingdom (Bede would write his own version of the text in 703).[39] In fact, according to the testimony of Ceolfrith, Adomnán visited either Wearmouth or Jarrow or both—Ceolfrith described the abbot of Iona as wishing to visit 'our monastery' (*nostrum monasterium*)—and it may well be that he interacted while there with a young Bede.[40] Ceolfrith also fostered close relations with Lindisfarne, Iona's daughter monastery in Northumbria.[41] Bede himself wrote first a verse and then a prose *uita* of St. Cuthbert of Lindisfarne at the request of the community of Lindisfarne and its long-serving abbot Eadfrith.[42] And, as Bede noted in the preface to the latter work, at least one monk, Herefrith, journeyed regularly between Wearmouth-Jarrow and Holy Island.[43] No doubt, the Lindisfarne-Iona axis was the route by which Bede

received many important Hiberno-Latin texts such as *De computo dialogus*, the *Expositio in septem epistolas catholicas* and—most importantly for the purposes of the present study—*De ordine creaturarum*.[44]

What were the limits of Bede's library?[45] This question is of enormous importance for the present study as Bede lies somewhat outside the medieval European cosmological tradition that is most often depicted in modern studies. To start, Bede was not familiar with the writings of Plato or his successors. He was entirely ignorant of Macrobius's *Commentarii in Somnium Scipionis* and Martianus Capella's *De nuptiis Philologiae et Mercurii*, both of which would go on to transmit much Platonic thought to the middle ages. The intellectual world of the early middle ages has often been characterized as dominated by Platonism, but, as John Marenbon has noted, in the period before Alcuin, Plato and his ideas barely make a ripple in the Latin West.[46] From a cosmological point of view, Bede has been ill-served by traditional intellectual histories, which often lump him in with later centuries of thought in which Platonism had a more direct influence. Bede was not familiar with many classical texts—he knew some Vergil,[47] Roger Ray has argued that he was familiar with some writings of Cicero[48]—nor does he seem to have known such important Christian philosophical works as Boethius's *De consolatione philosophiae*. It is important to remember, then, that for many aspects of Bede's cosmological understanding, he was reliant on three main texts (Pliny's *Naturalis historia*, Isidore's *De natura rerum* and the anonymous *De ordine creaturarum*) and on a smattering of facts drawn from the writings of the Church Fathers.

Modern scholarship and Bede the 'scientist'

The bibliography of scholarship on Bede, his life and his writings is a large one.[49] The vast majority of it is concerned with the *Historia ecclesiastica*, but there is a growing interest in his other works as well. Scholarship has begun to acknowledge that the entirety of Bede's corpus must be taken into consideration in order to paint a more rounded picture of his worldview. Where scholars once examined Bede's historiography separate to his exegesis, for instance, it is now generally agreed that there is more to be gained from a consideration of 'Bede, the exegete, as historian'.[50] This approach was particularly developed in the collection of essays edited by Scott DeGregorio and published in 2006, entitled *Innovation and Tradition in the Writings of the Venerable Bede*.[51] DeGregorio, in his introduction to that volume, spoke of 'the New Bede' and the development of 'an appreciation of the inter-textual dimension of Bede's writings … the recognition that they can and should be studied in full concert with each other rather than in isolation'.[52] This approach has borne fruit in a number of recent publications. Studies of Bede's eschatology and exegesis have provided evidence for the value of approaching Bede's writings as an integrated whole.[53] More specifically, a number of scholars have detailed the ways in which Bede's theology and exegesis

can be seen to have influenced the composition of his historiographical and hagiographical writings.[54]

This contextualized approach has not, however, been universally applied, nor have all aspects of Bede's thought been afforded the same level of reappraisal. No study has yet attempted to draw conclusions about Bede's cosmological thought by utilizing analysis of all of his writings. Instead, scholars have so far been happy to discuss Bede's cosmological thought in the context only of his texts on the natural world. *De natura rerum* is infrequently drawn upon by Bedan scholars (outside of a few enthusiasts), and his cosmological beliefs are rarely taken into account in studies that are not specifically focussed on *De natura rerum*. This book is an attempt to remedy that lack.

In the past few centuries, Bede's cosmological writings have most often been tackled by those historians who have wished to trace the origins and development of modern scientific thought. The prevalent view of European history that has held sway since at least the eighteenth century holds that the middle ages saw a marked decline in learning after the high of classical civilization and before the efflorescence of scholarship in the sixteenth century.[55] Influential modern thinkers from Gibbon to Weber argued that the medieval period was an 'Age of Faith' marked by a widespread credulity that was inimical to the development of scientific knowledge.[56] Although these views have been challenged many times in recent decades, not least by historians of science, they still have a hold on our understanding of medieval thought. Bede's place in this 'dark age' interpretation must be appreciated in order to understand the tenor of recent scholarship on his understanding of nature and cosmology. The influential historian of science, William Whewell, in his three-volume *History of the Inductive Sciences* (1837), painted the middle ages as a time when credulous religiosity held sway to such an extent that most thought the earth to be flat. He graciously placed Bede in a select group that were not taken in by this insidious and ubiquitous idea.[57] Others were less flattering. Henry Hart Milman argued that 'the science … of Bede was that of his age—the science of the ancients … narrowed rather than expanded by the natural philosophy supposed to be authorized and established by the language of the Bible'.[58] Even Milman, however, had to make respectful note of Bede's surprising habit of 'if not observing, [at least] recording the observations of others, on the causes of natural phenomena'.[59] Later Victorian scholars held similar views. Andrew Dickson White's *A History of the Warfare of Science with Theology in Christendom* (1896) was an important statement of the idea that science and religion had been fundamentally at odds throughout history; he thought that Bedan and pseudo-Bedan writings showed 'a scientific spirit, which might have come to something of permanent value had it not been hampered by the supposed necessity of conforming to the letter of Scripture'.[60] This type of interpretation extended into the twentieth century. Pierre Duhem applauded Bede's use of 'personal observation' in an age of barbarism.

He particularly extolled Bede's contribution to tidal theory: Bede was the first, according to Duhem to note the phenomenon now known as Establishment of a Port.[61] Bede was portrayed either as a rare example of rational thought in a dark age or at the very least as a thinker who showed some promise of scientific genius, who might have flourished were it not for the superstitious world in which he lived.

The image of a middle ages full of ignorant flat-earthers (as well as the related notion of an eternal war between science and religion) was thoroughly debunked in the second half of the twentieth century.[62] The idea that the Reformation saw a 'disenchantment of the world' that put paid to earlier medieval credulity has also been challenged.[63] The influence of earlier paradigms continued to cast a long shadow, however, and well into the twentieth century scholars still attempted to redeem Bede by identifying in him the spark of modern scientific rationalism. In a number of studies from the 1970s and 1980s, still cited approvingly in modern scholarship, historians attempted to demonstrate that Bede was a man out of time, whose research practices foreshadowed the scientific method and whose innate scepticism helped keep the worst of medieval superstition out of his writings. In practice, this meant that they pulled out individual threads of Bede's thought to demonstrate his proto-scientific approach; the rest of Bede's thought (which was not 'scientific') could be safely ignored. There was no attempt to provide a rounded interpretation of Bede's worldview. Thomas Eckenrode spoke of Bede as someone possessing a latent 'spirit of inquiry' whose 'attempts at reasoning' were stymied by, amongst other things, 'an age of theological overtones'.[64] Eckenrode dismissed Bede's cosmology as for the most part derivative and unoriginal; he sought therefore to highlight only those instances where he felt Bede showed 'flashes of independent judgment based on personal and continued observation'.[65] Many of the cases highlighted by Eckenrode as proof of Bede's evidence-based approach have since been shown to derive from one or other of Bede's sources.[66] In a separate article, Eckenrode returned to the subject of Bede's scientific approach. In *De temporum ratione*, he argued, Bede demonstrated a complex understanding of ocean tides; his great innovation, however, was that he emended received wisdom through observation and testing.[67] A third essay examined Bede's intellectual growth and concluded that in his later years he developed an 'inquiring attitude'.[68] This approach was continued by Wesley Stevens, who, in his Jarrow Lecture of 1985, attempted to define 'Bede's scientific achievement'.[69] According to Stevens, Bede taught that 'phenomena of the skies and phenomena of the earth could be explained rationally'.[70] Eckenrode and Stevens presented an image of someone struggling to anticipate the scientific method, who learned by observation and experiment.

In more recent years, Faith Wallis has provided a welcome reassessment of this image of Bede as modern scientist, particularly in an important chapter published in DeGregorio's *Innovation and Tradition* volume.[71] She has demonstrated that Bede's celebrated tidal theory was not based on

independent observation, as claimed by Duhem, Eckenrode and Stevens, but on information that he explicitly said was 'common local knowledge'.[72] His use of a sundial, meanwhile, 'cannot be construed as anything other than casual inspection; it is certainly not the trace of a research program'.[73] Wallis has also recognized the 'presentism' involved in discussing Bede's 'science', a concept that would have been entirely foreign to him. She notes that to continue to isolate Bede's scientific thought is out of step with new approaches that 'stress the interpenetration of the genres within which Bede worked'.[74] 'The challenge', writes Wallis, 'is to understand Bede's interest in the natural world in a manner which acknowledges its prominence in Bede's world-view, without dissolving its context'.[75]

The present study aims to build on Wallis's analysis and will seek to avoid the interpretation that sees Bede as a forebear of scientific rationalism. The danger of circumventing this reading, of course, is that one risks falling back on an equally hoary image: that of Bede as the epitome of the credulous 'dark age' dogmatist. In order to avoid this trap, I have drawn on studies of medieval doubt and scepticism, particularly Susan Reynolds's important study, 'Social Mentalities and the Cases of Medieval Scepticism'.[76] Reynolds's article is a critique of the often-unspoken assumption 'that people in the middle ages were less critical and rational than modern people and that religious faith came naturally to them'.[77] She notes that there is a difference 'between the content of thought and the process of thought':

> It is obvious that societies differ in their beliefs, traditions, values, attitudes. But does that imply a difference in the processes of thought? To put it at its crudest, are individuals in some societies less capable than individuals in other societies of criticizing and reasoning about the content of their thought? Given different premises, do different societies or cultures produce different ways of drawing, or not drawing, inferences from them?[78]

Rather than thinking of medieval people as living in a state of credulous belief, we should extend to them the same faculties that we see in ourselves. Scepticism, as Reynolds argues, was not 'foreign to "the medieval mind"'.[79] We should bear in mind that, for someone like Bede—who did not know, and could not have known, about gravity, electromagnetism, evolution by natural selection, the chemical elements, modern theories of psychology, or germ theory—the model of the cosmos that he inherited from his predecessors would have appeared to make sense and to accord with observable phenomena. There was no competing theory that explained the workings of the world as well or as convincingly. Even those aspects of medieval belief which are most difficult for modern audiences to swallow—particularly the miracles of the saints—seemed to operate according to their own internal logic and seemed to fit with observable phenomena (in theory at least; the important thing to remember about miracles is that one could accept the

miraculous as a whole without necessarily believing in every miracle one heard about). The point is that the opposite of uncritical faith does not necessarily look like modern sceptical atheism. A hypothetical early medieval 'rationalist' who truly wished to shed the assumptions inherited from tradition and strive through their own rigorous observations towards a new model of thought might arrive, in the end, at a position that would seem to us a religious one. Of course, Bede had no such aim in mind: he was a faithful Christian who fully accepted the patristic idea that the word of Scripture was to be taken seriously. This may at first glance seem to damn him to the credulous dark ages, but people in any society will often believe one thing without question while behaving rationally in other ways.[80] This is true in the present, and it was true in the eighth century. And, as I shall discuss in Chapter 2, Christian thinkers did not in fact accept every facet of Scripture literally: some biblical passages that conflicted with received wisdom about the nature of the universe were interpreted symbolically rather than literally. I will therefore seek in this study to approach Bede's cosmological thought with an open mind, exploring those aspects of his writings which now look like wrong turns as well as those that seem to prefigure the modern scientific method, giving equal space to those areas in which he was innovative *but wrong* as to those in which he proposed an answer that was to be ultimately vindicated by later discoveries.

Bede's methodology

An important theme of this book will be the way in which Bede fused his many differing cultural influences into a coherent view of the world. It has become common among scholars to talk of Bede's distinct method of 'concordance exegesis'.[81] In short, it has been noted that Bede, in his works of biblical commentary, made frequent use of other parts of Scripture in order to tease out details and significance not immediately apparent in a particular passage. Bede, as Arthur Holder put it, 'saw each part of Scripture as the word of God, and therefore all parts could illuminate the rest'.[82] To my mind, it is clear that this synthesizing approach was by no means limited to Bede's reading of Scripture. He often extrapolated on the details given in one source by using information drawn from elsewhere; this working method can be apprehended throughout his corpus of writings. He was happy, for instance, to support a biblical idea with a fact found in Pliny, or a cosmological discussion with reference to the Book of Genesis. An excellent example of this mode of thought is found in Bede's approach to the fate of the souls of the dead in the interim between death and the Last Judgement: as Helen Foxhall Forbes has argued in a recent article, Bede was able to use Gregory the Great's statements about the fate of souls at Judgement Day in order to explain what happened to souls at the moment of death, extrapolating logically outwards from one solid piece of information in order to fill in the gaps in the canvas.[83]

Bede did not mindlessly repeat classical and patristic factoids either. He often demonstrated an active engagement with the ideas under discussion, bringing his own experience to bear on weighty intellectual subjects. Sometimes, Bede took issue with his venerable predecessors, emending and correcting when he felt that they had got something wrong.[84] It was long held that Bede was particularly critical in his use of the writings of Isidore of Seville; this assumption has been challenged,[85] but Bede was certainly not shy of correcting the Spanish bishop when necessary.[86] Even Jerome could not escape his passion for exactitude.[87] In cases where we can compare Bede's work with a pre-existing textual model, it is clear that he substantially reworked and changed the emphases of the original.[88] At other times, Bede related topics of discussion back to details from his own life experience as a monk of Wearmouth-Jarrow. The relative sizes of the sun and the moon, for instance, were explained by Bede by analogy with the lamps hanging from the ceiling of a church—a setup that presumably mirrored the real-life arrangement in the Church of St. Peter in Jarrow.[89] In his commentary on the *Song of Songs*, he related a detail back to the fine lathework of the churches of St. Peter and St. Paul.[90] In his commentary on the Acts of the Apostles, he referred to a contemporary sailing practice common 'in the British sea' (*in Brittanico mari*) in order to shed light on an aspect of the narrative.[91] In this way, he was able to add to the tradition he had inherited from antiquity. We must not neglect, however, those instances in which Bede did *not* change or add to the received tradition. Bede was able to rely to a large extent on the work of his predecessors. He was not involved in building an edifice of original doctrine, as the Church Fathers had been, but in filling in the gaps, delineating the details, smoothing out the inconsistencies and—very occasionally—making original contributions of his own when needed. In many areas where Bede *did* introduce an innovative concept—such as the Eight Ages of the world or the fourfold division of souls at death—he did so by using information logically derived from statements elsewhere in Christian literature. Bede's ability to critically engage with his sources and to criticize, excise and reformat as he saw fit[92] also means that we must view as his own genuine opinion the swathes of Augustine or Gregory or other authorities that are reproduced verbatim in some of his works.

This approach to knowledge stood Bede well in his attempt to assemble a coherent and systematic model of the natural world and its laws. Bede had access to only a very small number of purely cosmological writings but, by drawing on the wide range of learning that was available to him in other kinds of works, he was able to develop his picture of the cosmos far beyond the boundaries imposed by this lack of resources. In fact, if Bede made one lasting contribution to the medieval cosmological tradition, it was to firm up the structure of the model inherited from previous generations by knitting together the various classical and Christian elements into a coherent whole. In this book, we shall see how Bede, using 'his brilliant powers of

assimilation and production',[93] codified a model of the cosmos that was comprehensive, logical and widely influential.

The intellectual background

I provide here a broad overview of the developments in cosmological thought up to the eighth century. This overview will not, by necessity, go into detail, but will seek to paint a generalized picture of the main strands of thought that preceded Bede. The general thrust of the history of European cosmology, science and natural philosophy has been delineated in a number of studies.[94] The emphasis in this potted history will be on the writers and ideas that Bede would have encountered in the library at Wearmouth-Jarrow.

The classical inheritance

Classical knowledge about nature and the cosmos was transmitted to the middle ages through a small number of texts. Bede's only direct window into classical natural philosophy came in the form of Pliny the Elder's *Naturalis historia*. However, there was also some scattered material to be found in patristic texts and in the writings of Isidore of Seville; although Bede may not have known them directly, the writings of Greek and Roman philosophers lay behind many of the ideas to be found in the ostensibly Christian texts in his library.

Since the time of the Pythagoreans, Greek and Roman thinkers had conceived of a universe consisting of a series of concentric, revolving spheres, at the centre of which rested the globe of the earth.[95] The basic building blocks of this cosmos were the four elements: earth, water, air and fire.[96] Everything in the universe was composed of a combination of one or more of these elements. The elements, moreover, were possessed of certain immutable characteristics that impacted upon the configuration of the universe. Most importantly, they each possessed different 'weights'; thus, earth, as the 'heaviest' element, naturally fell to the centre of the cosmos. Water, the next heaviest element, surrounded earth in a concentric sphere; it was followed by a sphere of air and finally a sphere of fire. The elements balanced each other out in such a way that this order would naturally assert itself. 'Thus', Pliny explained, 'through equal pressure in separate directions, everything remains in place, restrained by the restless revolution of the universe itself'.[97] Outwards from the spheres of the elements came the spheres of the planets—the Moon, Mercury, Venus, the Sun, Mars, Jupiter and Saturn. Above this, finally, came the sphere of the stars, or firmament. The spheres rotated according to their distance from the immobile centre: the first sphere, that of the moon, revolved slowly, while the firmament revolved fastest of all, completing one revolution in 24 hours. The earth thus lay immobile at the centre of a dynamic universe.

Throughout the many iterations of this cosmographical model ran a seam of dualism. It was assumed by many that human beings were composed of both bodily and spiritual matter, and that the cosmos reflected the same dichotomy. Most philosophers were of the opinion that the stars were living and divine.[98] One school of thought (attributed, perhaps wrongly, to Aristotle) surmised that above the spheres of the elements was a sphere composed of a kind of fifth element—aether—divine and eternal and of the same essence as the human spirit. Above the moon (or sometimes above the firmament), lay the aetherial sphere, unchanging and divine. Many Peripatetic, Stoic, Neoplatonic and, later, Christian writers rejected the idea of aether as a fifth element, and instead folded the aether into the fourth element, fire.[99] Nevertheless, the Aristotelian aether would cast a long shadow over ancient elemental theory, with many writers speaking of the region of the *aether* as composed of a more refined and rarefied element than the fire found on the terrestrial plane.[100] As Pliny would note, the word 'heaven' (*caelum*) could mean one of two things: 'heaven' in the sense of the sky, or atmosphere, surrounding the earth; and 'heaven' in the aetherial sense, a part of the universe that was 'rightly believed to be analogous to the divine; eternal, boundless, it was neither begotten nor will it ever end'.[101] This model of the universe was a physical reflection of the human body, itself divided between physical body and aetherial soul. Indeed, Pliny spent some time praising Hipparchus for proving that the human soul was part of the heavens.[102] Note that, in many iterations of this model, the aetherial realm was not necessarily immaterial in a Cartesian sense—it existed at a particular point *in space*. Many twentieth- and twenty-first-century scholars have been disinclined to read at face value the statements of ancient philosophers which describe the nous, the Prime Mover, or any other related incorporeal concept as being 'next to' the firmament, thereby implying spatiality. However, it is clear that this spatial aspect of the incorporeal world was accepted by most ancient philosophers. It has recently been demonstrated quite convincingly in the case of Plotinus, for instance.[103]

There were further connections between humankind and the wider cosmos.[104] The four seasons of the year were widely thought to mirror the elements in their predominant characteristics: summer, for instance, was warm and dry like the element of fire, while winter was cold and moist like water. The seasons also harmonized with the four periods of each individual's life: childhood (spring), youth (summer), middle age (autumn) and old age (winter). But that was not all. The theory of the humours, first proposed by Hippocrates in the fifth century BCE, was the preeminent medical theory up until the modern period. Defects of character or illness were explained as the preponderance of one kind of humour or the lack of another. These humours—blood, phlegm, yellow bile and black bile—were also tied, through an ineffable cosmic harmony, to the elements. Yellow bile, or *choler*, for instance, corresponded to fire—it was thus hot and dry and

was associated with summer and youth. People with too much of this humour were 'choleric': quick-tempered and truculent. It was also understood that different humours varied in strength at different times of the year. The power of the humours over human bodies was absolute. As Isidore would later summarize: 'by these four humours the healthy are ruled and the infirm are stricken. For when they increase beyond their natural course, they cause sickness'.[105]

Classical writers gave differing estimations regarding the moral and religious meaning of the cosmos. Greek and Roman writers sometimes discussed the world as a perfectly designed and orderly creation, purposefully formed for the needs of humanity.[106] Other writers saw in the natural world a senescence and a decline from an imagined, less degenerated version of nature.[107] This original nature was imagined without the various aspects that, from an anthropocentric point of view, made it imperfect. For the Greeks, this perfected nature was a common motif. Descriptions of remote natures presented a landscape where nature was shorn of its antagonistic aspects, and where ideal conditions prevailed (according, that is, to the perspective of humans in the Antique Mediterranean). Descriptions of the Golden Age are revealing of the way in which the people of Antique Mediterranean culture imagined nature as it should be: shaded, fertile (to an often incredible degree), plentifully watered, and free from extremes of heat and cold, from storms, floods and fires and from dangerous or poisonous plants and animals. This image of Golden Age nature was established in most of its respects by Hesiod (eighth century BCE), but it was transmitted most clearly to the middle ages by the Latin poetry of Vergil and Ovid.

The Christian contribution

The most important Christian thinkers of late antiquity wrote in a milieu in which classical philosophies, in particular Platonism, were a living tradition. As Lynn Thorndike observed of one such thinker, Basil of Caesarea:

> He accepts the literal sense of the first chapter of Genesis as a correct account of the universe, and, when he finds Greek philosophy and science in disagreement with the Biblical narrative, inveighs against the futilities and follies and conflicting theories and excessive elaborations of the philosophers … But at all other times he is apt to follow Greek science rather implicitly, accepting without question its hypothesis of four elements and four qualities, and taking all his details about birds, beasts, and fish from the same source.[108]

This analysis also holds true for most of the other Church Fathers, who accepted the basic axioms of classical cosmology almost without question.[109] The religious thought of such foundational Church writers as Basil,

Clement, Origen, Ambrose, Augustine and Jerome was steeped in the learning and preconceptions of Graeco-Roman culture. They generally disposed of those elements of pre-Christian cosmology that they felt could not be held in common with scriptural testimony, but were happy to accept many others. For one of them, Augustine of Hippo, it was clearly obvious that the universe was arranged according to the Neoplatonic model, and that scriptural references to other cosmological models were simply metaphors.[110] Not only that, but he assumed that Moses, the putative author of the Pentateuch, was familiar with elemental theory and that he had had it in mind when he composed the account of creation in the Book of Genesis.[111]

The most significant changes to the classical cosmological model came in the realm of ideas about the universe's beginning and end. Whereas many classical models had posited an eternal or recurring universe, Scripture provided a very clear depiction of cosmic creation, in the Book of Genesis, and a somewhat less clear one of cosmic destruction, in the Book of Revelation. These scriptural narratives posed a particular problem for early Christian theologians—were they to be taken literally or to be interpreted figuratively?—but the method of interpretation favoured by Augustine, which combined both literal and spiritual interpretation, eventually won out in the Latin West.[112] This caused some problems when scriptural statements could not be made to fit comfortably with classical assumptions about the universe and its physics. From these clashes arose the vibrant discussions of, for instance, the plurality of the heavens or the practicalities of bodily resurrection. The extent of the difficulties faced by those who wished to meld classical cosmology with biblical precept can be apprehended most clearly in the debate surrounding the waters above the firmament. The Book of Genesis stated that God had created a firmament 'amidst the waters' that divided the waters under the firmament from those that were above the firmament (Gen 1:6). Explaining this division of waters in the context of a Neoplatonic cosmic system required much original and ingenious thought on the part of Christian exegetes.[113] In the end, most patristic thinkers agreed that one had to accept the authority of Scripture over the internal logic of the classical cosmos, and the waters above the firmament became a permanent fixture of the medieval model of the universe.

The Christian estimation of the natural world as a moral entity was mixed. On the one hand, the world was seen as a testament to its Creator, who had formed everything and seen, as the Book of Genesis said, 'that it was good'; on the other, there was a rejection of the temporal world, whose degenerated condition reflected the fallen moral condition of man.[114] On top of this, Christian history had as its backbone the narrative of a degeneration from cosmic perfection, followed by a hard slog through imperfect nature, before reunification with the divine at the end of time. This basic framework, upon which so much medieval philosophy, science and culture hung, meant that there was an ever-present assumption that the world experienced

by humanity was the *incorrect* one—a shadow of the true cosmic perfection of the universe as it was meant to be. As the historian Robert Bultot has pointed out, the very structure of the Neoplatonic model of the universe lent support to this idea; it was based on the assumed self-evidence of a dualistic view of the world. The earth lay at the lowest point of the universe, where a degraded and changeable form of nature held sway; far above this was the purer and eternal realm of the aether. The human soul was of a piece with the eternal, higher aspects of the universe; it was dragged down to the lower, imperfect sphere by the corporeal body.[115] Asceticism as a moral system was therefore supported both by Scripture and by the cosmographical inheritance of the classical world.

One important change from the classical model was the demotion of 'nature'—from an independent, often semi-divine entity in its own right, to an extension of God's power. As opposed to their pagan predecessors, who had been wont to ascribe life and independence to the planets and the stars, Christian naturalists were instead keen to explain the motion of the heavens with reference to God's original creation and his continued overseeing of the workings of the universe.[116] Basil of Caesarea summarized this view of nature as follows:

> *sicut turbo pineus, ictu prioris verberis incitatus, curvatis spatiis gyros explicat tortuosos acutoque semel fundamine defixus, semetipse circumfert, ita naturae ratio, ex priore dei mandato sortita principium, per omne transit aevum, donec ad communem terminum finemque perveniat.*
>
> just as a wooden spinning top, incited by the impact of a prior blow, widens into circles of expanding space and, fixed on its tapered end, moves around itself; so the law of nature, appointed at the beginning by God's command, moves through all time until it reaches the end and goal of all.[117]

To the same end, Augustine devised a new vocabulary to discuss the continuing divine supervision of the world. He spoke of seeds (*semina*), which were created by God in the six days of creation, but which contained in themselves the germ of future realities.[118] These writers stressed that God was not just the creator of the world, but also a continuing, sustaining presence in that creation. One corollary of this view is that late antique Christian theologians did not envision a stark division between natural and divine causes. Later in the middle ages, Scholastic theologians would come to distinguish between 'natural' processes and 'super-natural' ones; the former were part of the everyday workings of nature; the latter were rare instances where the divine directly intrudes into this world. For the Scholastics and those who came after them, there was an objective difference between a natural event and a miracle; for the Church Fathers and early medieval theologians, miracles were simply those instances in which God seemed to be speaking to

humanity, but there was no distinction at a causal level between the marvellous feat of a saint and, say, a sunrise.[119]

One particular aspect of Christian worship led to the development of a vast body of writing concerned with the workings of the heavens. Easter was to be celebrated on the first Sunday after the full moon that fell on or after the vernal equinox. The reckoning of the date of Easter therefore depended on accurate measurement of the phases of the moon and correct dating of the vernal equinox. This meant that an entire genre of literature devoted to time-reckoning came into being in the first Christian centuries.[120] *Computus*, as this genre was known, was concerned primarily with information needed to reckon the date of Easter, but as a corollary of this it also covered information about the movements of the heavenly bodies and the structure and logic of the created universe. As such, works of computus were an important source for precise information about physics and cosmic topography.

The early medieval period, then, was heir to a wealth of cosmological, theological and naturalistic thought. These inherited ideas about God, the universe and nature did not become frozen in amber, however: they continued to arouse genuine interest and to inspire novel philosophical explorations in the Insular world of Bede's time. In Irish territories in the century before Bede, the writings of Augustinus Hibernicus and 'Virgilius Maro', exegetical texts such as *Pauca de Genesi*, and the work of Adomnán of Iona all betray a fascination with questions about creation.[121] Computistical writing continued to flourish.[122] Most importantly for our purposes, an anonymous work 'on the order of created things' (*De ordine creaturarum*) drew on Isidore and on Augustinus Hibernicus to formulate a new vision of the cosmos, seen through the lens of 'Creator and creation'.[123] Bede's fellow Northumbrians also demonstrated a fascination with classical-patristic cosmology. Caedmon's Hymn, an early Old English verse composition, is a song of praise to the 'architect' (*metud*) and 'divine shaper' (*haleg scepen*) of the universe.[124] Bede was an admirer of this work, and provided a Latin translation in his *Historia ecclesiastica*.[125] Even closer to home, the decoration of the Codex Amiatinus, the spectacular Gospel book produced at Wearmouth-Jarrow in the early eighth century, contained a number of fascinating illuminated pages that allegorize and epitomize the cosmos.[126] To the south, Wessex and Kent were home to many learned Christian scholars for whom cosmology constituted a particular interest: the *Enigmata* of Aldhelm and Tatwine display a playful preoccupation with the natural world,[127] and the surviving material from the school of Theodore and Hadrian at Canterbury likewise evinces a robust interest in God's creation.[128] Yet a surprising finding of the present study is that Bede drew little or nothing from this southern Anglo-Latin tradition, at least in terms of cosmological lore. When it came to understanding God's creation, Bede was much more influenced by the learning emanating from the north and west of him than immediately from the south.

An Anglo-Saxon cosmos?

Having explored the classical and Christian context of Bede's cosmological understanding, it is also important to ask whether it is possible to discern any influences on Bede's thought from outside the Christian mainstream. There are tantalizing references in Bede's writings to the pre-Christian beliefs of the *Angli*; these represent a very different cosmological vision to the Christian one. It is, however, extremely difficult to reconstruct any pre-Christian or non-Christian beliefs that may have existed in the Britain of Bede's day.[129] Bede's own depictions of paganism were very clearly shaped by the expectations of a Christian and a biblical scholar; for instance, the account in the *Historia ecclesiastica* of the conversion of the pagan priest, Coifi, mirrors Scripture in its language and symbolism and cannot be taken as a historical account of pagan religion.[130] Other texts, from the centuries after Bede, reveal the existence of an alternative view—not necessarily pagan (in the sense of something entirely incompatible with Christian belief) but one that we cannot imagine would have sat well with an orthodox churchman like Bede. Old English charms, for instance, integrated non-Christian elements into their basically Christian worldview.[131] No doubt Bede would not have approved of charms like *Æcerbot*, where the Almighty is asked to bless 'Erce, mother of Earth' ('Erce, eorðan modor').[132] No matter how we categorize them, then, worldviews that diverged from mainstream catholic doctrine were present in Anglo-Saxon England. But patristic literature provided Bede with a robust interpretative framework for understanding such beliefs. For Bede, as for the Church Fathers, paganism was imagined as a homogenous monolith; what was true for one type of paganism was true for all, and Bede had no problem with applying scriptural imagery of temples and high priests to Germanic beliefs. The fact that Anglo-Saxon paganism was polytheistic must have helped to reinforce a clear distinction between Christianity and all varieties of paganism. Seen through Bede's eyes, the landscape of Britain may still have been filled with spirits or powers, but they had been stripped of their divinity. For theologically well-educated Christians like Bede, they were demons and evil spirits, not gods.

Some scholars have seen in Bede's writings evidence of a particularly Anglo-Saxon reaction to the natural world. A story from the *Historia ecclesiastica* has been singled out as providing an especial insight into the way in which Bede viewed nature. The narrative is as follows: King Edwin, urged by Paulinus to accept baptism, looks to his chief men for advice. One of them offers the following parable to illustrate 'the present life of human beings on earth' (*uita hominum praesens in terris*):[133]

> *quale cum te residente ad caenam cum ducibus ac ministris tuis tempore brumali, accenso quidem foco in medio et calido effecto cenaculo, furentibus autem foris per omnia turbinibus hiemalium pluuiarum uel niuium,*

> *adueniens unus passerum domum citissime peruolauerit; qui cum per unum ostium ingrediens mox per aliud exierit, ipso quidem tempore quo intus est hiemis tempestate non tangitur, sed tamen paruissimo spatio serenitatis ad momentum excurso, mox de hieme in hiemem regrediens tuis oculis elabitur. Ita haec uita hominum ad modicum apparet; quid autem sequatur, quidue praecesserit, prorsus ignoramus.*
>
> You are sitting feasting with your ealdormen and thegns in winter time; the fire is burning on the hearth in the middle of the hall and all inside is warm, while outside the wintry storms of rain and snow are raging; and a sparrow flies swiftly through the hall. It enters in at one door and quickly flies out through the other. For the few moments it is inside, the storm and wintry tempest cannot touch it, but after the briefest moment of calm, it flits from your sight, out of the wintry storm and into it again. So this life of man appears but for a moment. What follows or, indeed, what went before, we know not at all.[134]

In his commentary on this passage, Calvin Kendall stresses that 'the threatening image is drawn from the natural world; the comforting one from the social. Life is good in hall or monastery'.[135] Jennifer Neville offers a similar reading: 'the human race lives precariously, with only brief moments of respite in places like the hall, which is surrounded on all sides—besieged even—by the forces of the natural world, by rain, storm and snow'.[136] For Neville, the tenor of the sparrow story is of a piece with the wider understanding of nature found in Old English poetry, which displays a similar conception of the divide between the hall—with its connotations of civilization and comfort—and the forest, the mere, the mountains or the tempestuous sea. The natural world was depicted by the Anglo-Saxons as a harsh and antagonistic backdrop against which man's powerlessness stands in stark relief.[137] Yet it is unlikely that this episode in the *Historia* reflects an especially *Anglo-Saxon* worldview. I have mentioned the dangers of taking Bede's depictions of pre-Christian episodes at face value. Most likely, Bede drew the allegory of life as a sparrow from Scripture, particularly versus such as Psalm 123:7 ('our soul, like a sparrow, has been rescued from the hunter's snare').[138] It is more useful to interpret this story as the way in which a Christian like Bede viewed the life of a non-Christian: a pagan was a person with no understanding of the wider cosmic significance of his or her existence outside the narrow confines of temporal life. If anything, this episode underlines how effective Christian cosmology was, at least in Bede's eyes, as a way of understanding and giving meaning to human experience.

All of this is not to deny that Bede's homeland had an effect on his worldview. Although any local 'pagan' or folk beliefs are unlikely to have influenced Bede one way or another, his inheritance was meaningful to him in other ways. As a number of scholars have effectively illustrated, Bede was

very aware of the place of his *gens* in the narrative of ecclesiastical world history.[139] The story of his own people, although it no doubt interested Bede for many reasons, was subsumed into the greater cosmic narrative of Christian time and viewed through a universalist Christian lens.

Conclusion: Bede's cosmos

The basics of classical cosmology were inescapable for most Christian thinkers in late antiquity and the early middle ages. The structure of the universe, the divide between bodily and spiritual realities, and especially the theory of the four elements underlay many of the early theological extrapolations made by Basil, Ambrose, Augustine and others—extrapolations that would later become dogma. Graeco-Roman theories had also been transformed, in turn, by Christian theology, leading to a very particular vision of the cosmos with elements of both traditions. As we shall see, Bede interpreted the natural world in light of these assumptions. As a cosmologist, he was certainly no innovator on a grand scale. He accepted without question most of the basic cosmological axioms that he read about in the books in his library. But he also found holes and areas of uncertainty, and it is here, as we shall see, that his faculty for synthesis and explanation reveals itself.

Notes

1 Bede, *Historia ecclesiastica gentis Anglorum* (henceforth, *HE*) 5.24 (ed. Lapidge, SC 491, 188; translation adapted from Colgrave and Mynors, 567): 'ex eo tempus … omnem meditandis scripturis operam dedi, atque inter obseruantiam disciplinae regularis, et cotidianam cantandi in ecclesia curam, semper aut discere aut docere aut scribere dulce habui'.

2 Cuthbert, *Epistola de obitu Bedae* (ed. Colgrave and Mynors, 582).

3 The present study, it should be noted, will not be concerned with Bede's understanding of time and number, except where they cross over with his understanding of physics and cosmology. For discussions of Bede's computus and his ideas about time, number and chronology, see C.W. Jones, *Bedae Opera de Temporibus* (Cambridge, MA, 1943), 3–172; F. Wallis, *Bede: The Reckoning of Time* (Liverpool, 1999), xv–ci; B. Englisch, 'Realitätsorientierte Wissenschaft oder praxisfernes Traditionswissen? Inhalte und Probleme mittelalterlicher Wissenschaftsvorstellungen am Beispiel von "De temporum ratione" des Beda Venerabilis', in E. Strauss (ed.), *Dilettanten und Wissenschaft: Zur Geschichte und Aktualität eines wechselvollen Verhältnisses* (Amsterdam, 1996), 11–34.

4 On the dangers of projecting the modern ideal of science back onto pre-modern categories of knowledge, see D.C. Lindberg, 'Science and the Early Church', in D.C. Lindberg and R.L. Numbers (eds), *God and Nature: Historical Essays on the Encounter between Christianity and Science* (Berkeley, CA, 1986), 19–48, at 20–2; M.H. Shank and D.C. Lindberg, 'Introduction', in D.C. Lindberg and M.H. Shank (eds), *The Cambridge History of Science: Volume 2: Medieval Science* (Cambridge, 2013), 1–26, at 5–6; A. Cunningham, 'Getting the Game Right: Some Plain Words on the Identity and Invention of Science', *Studies*

in the History and Philosophy of Science, 19 (1988), 365–89; A. Cunningham, 'De-centring the "Big Picture": The Origins of Modern Science and the Modern Origins of Science', *British Journal for the History of Science* 26 (1993), 407–32.
5 F. Wallis, '*Si Naturam Quaeras*: Reframing Bede's "Science"', in S. DeGregorio (ed.), *Innovation and Tradition in the Writings of the Venerable Bede* (Morgantown, WV, 2006), 65–99, at 68.
6 See below 155–7 and 170 n27.
7 I have also sometimes used the terms 'natural philosophy' and 'physics' when it has seemed appropriate, though of course the reader should bear in mind that Bede was neither a natural philosopher in the later medieval sense nor a physicist in the modern one.
8 'Cosmology', s.v. *Encyclopedia of Social and Cultural Anthropology*; A. Abramson and M. Holbraad (eds), *Framing Cosmologies: The Anthropology of Worlds* (Manchester, 2014); M. Douglas, *Natural Symbols: Explorations in Cosmology* (New York, 1973).
9 N. Murphy and G.F.R. Ellis, *On the Moral Nature of the Universe: Theology, Cosmology and Ethics* (Minneapolis, 1996), 1–3.
10 On the circumstances surrounding the founding of Wearmouth and Jarrow, see I.N. Wood, 'The Foundation of Bede's Wearmouth-Jarrow', in S. DeGregorio (ed.), *The Cambridge Companion to Bede* (Cambridge, 2010), 84–96.
11 On the political history of Northumbria, see D. Rollason, *Northumbria, 500–1100: Creation and Destruction of a Kingdom* (Cambridge, 2003).
12 S. Foot, 'Church and Monastery in Bede's Northumbria', in S. DeGregorio (ed.), *The Cambridge Companion to Bede* (Cambridge, 2010), 54–68; C.B. Kendall, 'Bede and Education', in S. DeGregorio (ed.), *The Cambridge Companion to Bede* (Cambridge, 2010), 99–112, at 100–4.
13 G. Bonner, 'Bede and Medieval Civilization', *Anglo-Saxon England* 2 (1973), 71–90, at 78–9; J. Blair, 'Anglo-Saxon Minsters: A Topographical Review', in J. Blair and R. Sharpe (eds), *Pastoral Care Before the Parish* (Leicester, 1992), 226–66, at 227–31; D. Petts, 'Coastal Landscapes and Early Christianity in Anglo-Saxon Northumbria', *Eesti Arheoloogia Ajakiri* 13 (2009), 79–95; C. Ferguson, 'Re-evaluating Early Medieval Northumbrian Contacts and the "Coastal Highway"', in D. Petts and S. Turner (eds), *Early Medieval Northumbria: Kingdoms and Communities, AD 450–1100* (Turnhout, 2012), 283–302; M. Carver, 'Intellectual Communities in Early Northumbria', in D. Petts and S. Turner (eds), *Early Medieval Northumbria: Kingdoms and Communities, AD 450–1100* (Turnhout, 2012), 185–206; R.K. Morris, *Journeys from Jarrow, Jarrow Lecture* (Jarrow, 2004).
14 See the comments of C. O'Brien, *Bede's Temple* (Oxford, 2015), 61, 94; and S. Coates, 'Ceolfrid: History, Hagiography and Memory in Seventh- and Eighth-Century Wearmouth–Jarrow', *Journal of Medieval History* 25 (1999), 69–86, at 85–6.
15 Kendall, 'Bede and Education', 100–4.
16 Bede, *HE* 5.21 (ed. Lapidge, SC 491, 162). On Ceolfrtih, see I.N. Wood, *The Most Holy Abbot Ceolfrid, Jarrow Lecture* (Jarrow, 1995); J. Grigg, 'Paschal Dating in Pictland: Abbot Ceolfrid's Letter to King Nechtan', *Journal of the Australian Early Medieval Association* 2 (2006), 85–101.
17 M. Lapidge, 'Some Remnants of Bede's Lost Liber Epigrammatum', *The English Historical Review* 90 (1975), 798–820, 806–7.
18 R.L.S. Bruce-Mitford, *The Art of the Codex Amiatinus, Jarrow Lecture* (Jarrow, 1968), repr. in M. Lapidge (ed.), *Bede and his World: The Jarrow Lectures, 1979–1993*, 2 vols. (Aldershot, 1994), I, 185–234; M.B. Parkes, *The Scriptorium of Wearmouth-Jarrow*, Jarrow Lecture (Jarrow, 1982), repr. in M. Lapidge (ed.), *Bede and His World: The Jarrow Lectures, 1979–1993*, 2 vols. (Aldershot, 1994),

I, 185–234; P. Meyvaert, 'Bede, Cassiodorus and the Codex Amiatinus', *Speculum* 71 (1996), 827–83; C. Chazelle, 'Ceolfrid's Gift to St Peter: The First Quire of the *Codex Amiatinus* and the Evidence of its Roman Destination', *Early Medieval Europe* 12 (2003), 129–58.

19 On Hwætberht, see C. O'Brien, 'Hwaetberht, Sicgfrith and the Reforming of Wearmouth and Jarrow', *Early Medieval Europe* 25 (2017), 301–19; cf., on his possible authorship of the *Enigmata*, R. Love, 'Insular Latin Literature to 900', in C.A. Lees (ed.), *The Cambridge History of Early Medieval English Literature* (Cambridge, 2013), 120–57, at 142–4. The *Enigmata* are edited by F. Glorie in CCSL 133, 211–71. Hwætberht's letter to Gregory II is partially preserved in Bede, *HA* 19 (ed. Grocock and Wood, 66–8).

20 Kendall, 'Bede and Education', 103.

21 Bede's explanation for volcanoes is discussed below, 36.

22 Bede, *DTR* 26 (ed. Jones, CCSL 123B, 361–2; trans. Wallis, 78).

23 Bede, *HA* 4 (ed. Grocock and Wood, 30): 'librosque omnis diuinae eruditionis non paucos uel placito pretio emptos uel amicorum dono largitus retulit'.

24 Bede, *HA* 6 (ed. and trans. Grocock and Wood, 34–5).

25 R. Love, 'The Library of the Venerable Bede', in R. Gameson (ed.), *The Cambridge History of the Book in Britain* (Cambridge, 2011), 606–32, at 631.

26 Love, 'The Library of the Venerable Bede'; Lapidge, *Anglo-Saxon Library*, 34–7, 191–228; M.L.W. Laistner, 'The Library of the Venerable Bede', in A.H. Thompson (ed.), *Bede: His Life, Times and Writings: Essays in Commemoration of the Twelfth Centenary of His Death* (Oxford, 1935), 263–66.

27 G.H. Brown, 'The Psalms as the Foundation of Anglo-Saxon Leaning', in N. Van Deusen (ed.), *The Place of the Psalms in the Intellectual Culture of the Middle Ages* (New York, 1999), 1–24; A.H. Blom, *Glossing the Psalms* (Berlin, 2017), 9–35. The two earliest collections of Psalm glosses are the *Glosa Psalmorum ex traditione seniorum* (composed in the early seventh century in southern Gaul) and the *Breuiarium in Psalmos* (mid-seventh-century; an Irish origin has been claimed), which expanded on the *Glosa Psalmorum*'s comments with extra material drawn particularly from Jerome. There is still much work to be done on delineating the development of these glosses and their dissemination.

28 On the possible contents of some of these 'vanished libraries', see Lapidge, *Anglo-Saxon Library*, 32–44.

29 Bede, *Epistola ad Ecgbertum* 1 (ed. Grocock and Wood, 124): 'cum tecum aliquot diebus legendi gratia in monasterio tuo demorarer'.

30 Bede, *Epistola ad Wicthedum* (ed. Jones, CCSL 123C).

31 N.J. Higham, *(Re-)Reading Bede: The* Ecclesiastical History *in Context* (Abingdon, 2006), 15.

32 Bede, *Epistola ad Pleguinam* 3 (ed. Jones, CCSL 123C, 617–8).

33 D.P. Kirby, 'Bede's Native Sources for the *Historia Ecclesiastica*', *Bulletin of the John Rylands Library* 48 (1966), 341–71.

34 Bede, *HE* 4.17 (ed. Lapidge, SC 490, 292).

35 Bede, *HE* praef. 2–3 (ed. Lapidge, SC 489, 96–102).

36 On Nothhelm and the papal letters, see J. Story, 'Bede, Willibrord and the Letters of Pope Honorius I on the Genesis of the Archbishopric of York', *English Historical Review* 127 (2012), 783–818, at 788–9.

37 P. Sims-Williams, 'The Settlement of England in Bede and the Chronicle', *Anglo-Saxon England* 12 (1983), 1–41, at 22 n90; M. Costambeys, 'Albinus'; Miller, 'Bede's Use of Gildas', 252–3.

38 Bede, *HE* 2.19 (ed. Lapidge, SC 489, 390–4).

39 On Adomnán and Aldfrith, see B. Yorke, 'Adomnán at the Court of King Aldfrith', in J. Wooding with R. Aist, T. Clancy and T. O'Loughlin (eds), *Adomnán of Iona: Theologian, Lawmaker, Peacemaker* (Dublin, 2010), 36–50.

40 Bede, *HE* 5.21 (ed. Lapidge, SC 491, 162).
41 C. Stancliffe, 'The Irish Tradition in Northumbria after the Synod of Whitby', in R. Gameson (ed.), *The Lindisfarne Gospels: New Perspectives* (Leiden, 2017), 19–42, at 39–40, 42.
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43 Bede, *VCP* prol. (ed. Colgrave, 144).
44 For Bede's use of this text, see below Chapter 2, partic. 41–4.
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47 N. Wright, 'Bede and Vergil', *Romanobarbarica* 6 (1981–2), 361–79; repr. in his *History and Literature in Late Antiquity and the Early Medieval West* (Aldershot, 1995), no. XI.
48 R. Ray, 'Bede and Cicero', *Anglo-Saxon England* 16 (1987), 1–15; R. Ray, *Bede, Rhetoric, and the Creation of Christian Latin Culture*, Jarrow Lecture (Jarrow, 1997).
49 Useful starting points for Bede's life and thought are S. DeGregorio, *The Cambridge Companion to Bede* (Cambridge, 2010); G.H. Brown, *A Companion to Bede* (Woodbridge, 2009); Hunter Blair, *The World of Bede* (Cambridge, 1970). Many of the essays in A.H. Thompson (ed.), *Bede: His Life, Times and Writings* (Oxford, 1935) and G. Bonner (ed.), *Famulus Christi: Essays in Commemoration of the Thirteenth Centenary of the Birth of the Venerable Bede* (London, 1976) are still useful.
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51 S. DeGregorio (ed.), *Innovation and Tradition in the Writings of the Venerable Bede* (Morgantown, WV, 2006).
52 S. DeGregorio, 'Introduction: The New Bede', in S. DeGregorio (ed.), *Innovation and Tradition* (Morgantown, WV, 2006), 1–10, at 5.
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61 Duhem, *Le systeme du monde*, 8 vols. (Paris, 1913–58), III, 16–20.
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65 Eckenrode, 'Venerable Bede as a Scientist', 501.
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70 Stevens, *Bede's Scientific Achievement*, 5.
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72 Wallis, 'Reframing Bede's "Science"', 70; *DTR* 29 (CCSL 123B, 370).
73 Wallis, 'Reframing Bede's "Science"', 70.
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75 Wallis, 'Reframing Bede's "Science"', 68.
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78 Reynolds, 'Social Mentalities', 23.
79 Reynolds, 'Social Mentalities', 40–1.
80 Reynolds, 'Social Mentalities', 24.
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86 Bede, *Retractatio* 1, 27 (ed. Laistner, CCSL 121, 107, 162).

87 Bede, *Retractatio* 1 (ed. Laistner, CCSL 121, 107); Thacker, 'Bede and the Ordering of Understanding', 45.

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89 Bede, *DTR* 26 (ed. Jones, CCSL 123B, 361).

90 Bede, *In cant*. 4.7.2 (ed. Hurst, CCSL 119B, 317); Meyvaert, 'Bede the Scholar', 47, 64 n30.

91 Bede, *Exp.Act.* 27 (ed. Laistner, CCSL 121, 94).

92 Meyvaert, 'Bede the Scholar', 42–4.

93 Brown, *Companion to Bede*, 2.

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97 Pliny, *NH* 2.4 (LCL 330, 170): 'sic pari in diversa nisu in suo quaeque loco consistere, inrequieto mundi ipsius constricta circuitu'.

98 R.C. Dales, 'The De-Animation of the Heavens', *Journal of the History of Ideas* 41 (1980), 531–50, at 531–2.

99 Sambursky, *The Physical World*, 122–32; Sorabji, *The Philosophy of the Commentators, Volume 2. Physics*, 357–74; D.E. Hahm, *The Origins of Stoic Cosmology* (Columbus, OH, 1977), 92–4; Ambrose, *Hex*. 1.6.23–4 (ed. Schenkl, CSEL 32.1, 21–2); Eustathius, *in hexaemeron Basilii* 1.11.1 (ed. Amand de Mendieta and Rudberg, 16–18).

100 Smyth, *Understanding the Universe*, 51–2.

101 Pliny, *NH* 2.1 (LCL 330, 170): 'numen esse credi par est, aeternum, inmensum, neque genitum neque interiturum umquam'.

102 Pliny, *NH* 2.24 (LCL 330, 238).

103 J. Wilberding, '"Creeping Spatiality": The Location of Nous in Plotinus' Universe', *Phronesis* 50 (2005), 315–34. See further discussion in Chapter 4.

104 N. Arikha, *Passions and Tempers: A History of the Humours* (New York, 2007).

105 Isidore, *Etymologiae* 4.5.7 (ed. Lindsay): 'Ex his quattuor humoribus reguntur sani, ex ipsis laeduntur infirmi. Dum enim amplius extra cursum naturae creuerint, aegritudines faciunt'.

106 C. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley, CA, 1967), 35–79.

107 For instance, Lucretius, *De rerum natura* 5.39–42 (LCL 181, 382); A.O. Lovejoy and G. Boas, *Primitivism and Related Ideas in Antiquity* (New York, 1935); H.C. Baldry, 'Who Invented the Golden Age?', *Classical Quarterly* 2 (1952), 83–92.

108 L. Thorndike, *A History of Magic and Experimental Science During the First Thirteen Centuries of Our Era*, 8 vols. (London, 1923–58), I, 485.

109 For a recent overview of early Christian use of classical philosophy and culture, see H. Inglebert, *Interpretatio Christiana: Les mutations des savoirs (cosmographie, géographie, ethnographie, histoire) dans l'Antiquité chrétienne, 30-630 après J.-C.* (Paris, 2001), 25–73. A number of early Christians criticized particular pagan cosmological ideas—Lactantius, for instance, rejected the idea of a spherical earth—but these were the exceptions (Lactantius, *Divinae institutiones* 3.24, Brandt, 254–6). The vast majority of Christian authors accepted the notion of a spherical earth. On patristic and early Christian cosmology, see: D.C. Lindberg, 'Early Christian Attitudes toward Nature', in G.B. Ferngren (ed.), *Science and Religion: A Historical Introduction* (Baltimore, 2002), 47–56; D.C. Lindberg, 'Science and the Early Church', in D.C. Lindberg and R.L. Numbers (eds), *God and Nature: Historical Essays on the Encounter between Christianity and Science* (Berkeley, 1986), 19–48; D.S. Wallace-Hadrill, *The Greek Patristic View of Nature* (Manchester, 1968); L. Ferrari, 'Augustine's Cosmography', *Augustinian Studies* 27 (1996), 131–77; Duhem, *Le système du monde*, II, 393–501. A useful overview of ancient and medieval approaches to the natural world can be found in the first chapter of Anna Dorofeeva's forthcoming monograph,

Reading Nature in the Early Middle Ages. Writing, Language and Creation in the Latin Physiologus, *c.700–1000*. I am grateful to Dr Dorofeeva for allowing me to read this chapter before publication.
110 Augustine, *DGAL* 2.9 (ed. Zycha, CSEL 28, 45–7).
111 Augustine, *DGAL* 3.6 (ed. Zycha, CSEL 28, 68).
112 For the history of scriptural interpretation see B. Smalley, *The Study of the Bible in the Middle Ages*, 3rd ed. (Oxford, 1983); M. Simonetti, *Biblical Interpretation in the Early Church: An Historical Introduction to Patristic Exegesis*, trans. J.A. Hughes (Edinburgh, 1994).
113 T. O'Loughlin, '*Aquae super caelos* (Gen 1:6–7): The First Faith-Science Debate?', *Milltown Studies* 29 (1992), 92–114.
114 Glacken, *Traces on the Rhodian Shore*, 161–3.
115 R. Bultot, 'Cosmologie et "contemptus mundi"', in R. Hissette, G. Michiels, D. Van den Auweele (eds), *Sapientiae Doctrina: Mélanges de théologie et de littérature médiévales offerts à Dom Hildebrand Bascour OSB*, Recherches de Théologie Ancienne et Mediévale, numéro spécial 1 (Leuven, 1980), 1–23.
116 Dales, 'The De-Animation of the Heavens', 532–4.
117 Eustathius, *In hexaemeron Basilii* 5.10.2 (ed. Amand de Mendieta and Rudberg, 69).
118 Augustine, *DGAL* 6.11, 6.14–18, 9.16–18 (ed. Zycha, CSEL 28, 183–4, 189–92, 289–93); *De Trinitate* 3.8.13–15 (ed. Mountain, 139–43).
119 See below 155–9.
120 B. Blackburn and L. Holford-Strevens, *The Oxford Companion to the Year: An Exploration of Calendar Customs and Time-reckoning* (Oxford, 1999), 791–828; A.A. Mosshammer, *The Easter Computus and the Origins of the Christian Era* (Oxford, 2008).
121 Virgilius Maro Grammaticus's writings are edited in G. Polara and L. Caruso, *Virgilio Marone Grammatico: Epitomi ed Epistole*, Nuovo Medioevo 9 (Naples 1979). For *Pauca de Genesi*, see D. Ó Cróinín, 'A New Seventh-Century Irish Commentary on Genesis', *Sacris Erudiri* 40 (2001). Adomnán's *De locis sanctis* is edited in D. Meehan, *Adamnan's De Locis Sanctis, Scriptores Latini Hiberniae* 3 (Dublin, 1958), reptd. in CCSL 175 (Turnhout, 1965), 175–234.
122 A valuable recent introduction is found in I. Warntjes, *The Munich Computus: Text and Translation. Irish computistics between Isidore of Seville and the Venerable Bede and its reception in Carolingian Times* (Stuttgart, 2010), xxx–lvi.
123 *DOC* (ed. Díaz y Díaz); C. Stancliffe, 'Creator and Creation: A Preliminary Investigation of Early Irish Views and their Relationship to Biblical and Patristic Traditions', *CMCS* 58 (2009), 9–27.
124 *Caedmon's Hymn* (O'Donnell, 222).
125 Bede, *HE* 4.22 (ed. Lapidge, SC 490, 334).
126 See discussion in O'Brien, *Bede's Temple*, 90–100; Darby, 'The Codex Amiatinus *Maiestas Domini* and the Gospel Prefaces of Jerome', *Speculum* 92 (2017), 343–71.
127 F. Glorie ed., *Collectiones Aenigmatum Merovingicae Aetatis*, 2 vols., CCSL 133–133A (Turnhout, 1968); M. Lapidge and M. Herren, *Aldhelm: The Prose Works* (Cambridge, 1979) 155–60; M.L. Cameron, 'Aldhelm as Naturalist: A Re-Examination of Some of his *Enigmata*', *Peritia* 4 (1985), 117–33; N. Howe, 'Aldhelm's *Enigmata* and Isidorian Etymology', *ASE* 14 (1985), 37–59; M. Salvador-Bello, *Isidorean Perceptions of Order: The Exeter Book Riddles and Medieval Latin Enigmata* (Morgantown, WV, 2015).
128 B. Bischoff and M. Lapidge, *Biblical Commentaries from the Canterbury School of Theodore and Hadrian* (Cambridge, 1994).
129 On the dangers of such attempts see I.N. Wood, 'Pagan Religions and Superstitions East of the Rhine from the Fifth to the Ninth Century', in G. Ausenda (ed.), *After Empire. Towards an Ethnology of Europe's Barbarians* (Woodbridge,

1995), 253–68; S.D. Church, 'Paganism in Conversion-Age Anglo-Saxon England: The Evidence of Bede's Ecclesiastical History Reconsidered', *History* 93 (2008), 162–80; J.D. Niles, 'Pagan Survivals and Popular Belief', in M. Godden and M. Lapidge (eds), *The Cambridge Companion to Old English Literature*, 2nd ed. (Cambridge, 2013), 126–41.

130 J. Barrow, 'How Coifi Pierced Christ's Side: A Re-Examination of Bede's *Ecclesiastical History*, II, Chapter 13', *The Journal of Ecclesiastical History* 62 (2011), 693–706.

131 K. Jolly, 'Anglo-Saxon Charms in the Context of a Christian World View', *Journal of Medieval History* 11 (1985), 279–93.

132 E.V.K. Dobbie, *The Anglo-Saxon Minor Poems* (New York, 1942), 116–18.

133 Bede, *HE* 2.13 (ed. Lapidge, SC 489, 364).

134 Bede, *HE* 2.13 (ed. Lapidge, SC 489, 364; trans. Colgrave and Mynors, 183–5).

135 C.B. Kendall, 'Imitation and the Venerable Bede's *Historia Ecclesiastica*', in M.H. King and W.M. Stevens (eds), *Saints, Scholars and Heroes: Studies in Medieval Culture in Honour of Charles W. Jones* (Collegeville, MN, 1979), 161–90, at 179.

136 J. Neville, *Representations of the Natural World in Old English Poetry*, Cambridge Studies in Anglo-Saxon England 27 (Cambridge, 1999), 24–5.

137 Neville, *Representations of the Natural World*, 19–52.

138 Church, 'Paganism in Conversion-Age Anglo-Saxon England', 175; D.K. Fry, 'The Art of Bede: Edwin's Council', in M.H. King and W.M. Stevens (eds), *Saints, Scholars and Heroes: Studies in Medieval Culture in Honour of Charles W. Jones* (Collegeville, MI, 1979), I, 197–207.

139 J. Davidse, 'The Sense of History in the Works of the Venerable Bede', *Studi Medievali* 23 (1982), 647–95, at 664–8; O'Reilly, 'Islands and Idols'; A.H. Merrills, *History and Geography in Late Antiquity* (Cambridge, 2005), 237–9; D. Scully, 'Location and Occupation: Bede, Gildas, and the Roman Vision of Britain', in J. Roberts and L. Webster (eds), *Anglo-Saxon Traces* (Tempe, AZ, 2011), 243–72.

2 *De natura rerum* and the topography of the cosmos

In the introduction, I provided a brief overview of cosmological thought in the centuries before Bede. We saw how, although classical science was occasionally denigrated by Christian writers, many of its basic axioms were taken for granted by important and influential thinkers such as Basil, Ambrose and Augustine. Pliny's *Naturalis historia* continued to be copied enthusiastically in north-western Europe in the late Roman and post-Roman period, and classical scientific ideas sat (a trifle uneasily) alongside a scriptural cosmos in the popular encyclopaedic writings of Isidore of Seville. In the Insular world, classical science and the tenets of Scripture were brought together in a number of important works from the century before Bede. All of these works espoused more or less the same cosmographical framework: a geocentric model of the universe, arranged according to the properties of the elements and reflecting a basic dualistic division between the material and non-material realms.

That Bede assumed the truth of this cosmic model is evinced by his explicit discussion of it both at the beginning of his career—in *De natura rerum*—and near the end—in *De temporum ratione* and *In Genesim*. It was so widely disseminated and accepted in the wider medieval world that there is no way to trace its exact transmission to Wearmouth-Jarrow. It is found in almost every text which makes mention of the created world and which was available to Bede. He would have come across references to it in the writings of Augustine, Jerome, Basil, Ambrose, Gregory and many other authorities. More detailed information would have been provided by Isidore's writings, Pliny's *Naturalis historia* (the only work of non-Christian natural philosophy known to Bede) and *De ordine creaturarum*. In other words, Bede's cosmological understanding was founded on the unquestioned acceptance of the basic axioms of classical science. We should not think of Bede as working in a milieu in which the shape of the earth, for instance, was open to confusion, as some recent studies have claimed.[1] Rather, it was the case that almost all—if not all—of the books in Bede's library were in agreement about the structure and shape of the cosmos. It likely would not have occurred to Bede to disown them, especially as assumptions about the shape of the earth and elemental theory infused—or seemed to infuse—much of

Scripture itself.[2] Within this basic framework, however, there was still room for innovation and personal interpretation. We see this very clearly in Bede's cosmological writings, in which he attained an impressive level of invention and creative thought within the bounds of an overall fairly static tradition.

The main text through which we glimpse Bede's understanding of cosmic topography and physics is an early work, *De natura rerum*.[3] *De natura rerum* was composed in 703,[4] when Bede was about 30 years old, around the time that he was ordained a priest. He seems to have conceived of it as the partner-volume to his treatise on time, *De temporibus*. *De natura rerum* would never be superseded in Bede's corpus, but he did return to some of the same subject matter in his magisterial work of time-reckoning, *De temporum ratione*, in 725. Both *De natura rerum* and *De temporum ratione* have been the subjects of a small but insightful body of scholarship. Both have received handsome translations in Liverpool University Press's Translated Texts for Historians series: *De temporum ratione* in 1999, with detailed introduction, notes and commentary from Faith Wallis, and *De natura rerum* in 2010, from Wallis and Calvin Kendall.[5] These works have also been discussed in studies by Wallis, Charles W. Jones, Thomas Eckenrode, Wesley Stevens and Alessandra Di Pilla.[6] Finally, in 2013, *De natura rerum* was translated into Italian by Elisa Tinelli, who also provided an introduction and commentary.[7] These studies have generally been edifying and informative, though there are some conclusions with which I shall disagree and some points which I will seek to clarify in this chapter. Many scholars have been concerned to draw attention to the aspects of Bede's understanding that still stand up as good science (for instance, his advanced understanding of tidal theory). As noted in Chapter 1, I wish to move away from the celebration of Bede as a 'scientist' (a concept which he would have found mystifying) and will attempt instead to provide a more balanced overview of his cosmology, taking the good (those prescient ideas that seem to prefigure modern discoveries) with the bad (the theories that Western science has jettisoned).

De natura rerum: context and structure

Let us turn first of all to *De natura rerum*, the text which provides us with the clearest window into Bede's cosmographical understanding. Modern scholars of this work are lucky in that the information in *De natura rerum* was derived from a comparatively small number of readily identifiable texts. It is thus possible to reconstruct a relatively limpid picture of the textual transmission of basic cosmographical knowledge to Bede. In composing such a work, Bede was working within a well-established genre; *De natura rerum*'s ultimate antecedent was the first-century BCE poem, *De rerum natura*, by the Roman philosopher Lucretius. Though he knew of Lucretius by reputation, it seems unlikely that Bede would have known this work at first hand (a handful of textual correspondences are too slight to indicate familiarity).[8] We should, however, bear in mind Tinelli's conjecture that Bede

may have had access to a florilegium with some Lucretian material.[9] In any event, the direct influence of Lucretius's poem on Bede's text would appear to be minor at most.

We are on safer ground in discussing the influence of Pliny the Elder's *Naturalis historia*, of which Bede was an unabashed fan. He spoke in admiring tones of Pliny and his 'most delightful book' (*opus pulcherrimus*).[10] It is likely however that he did not have access to all 37 books of Pliny's compendious work. The evidence of an eighth-century manuscript from Northumbria (Leiden, Bibliotheek der Rijksuniversiteit, Voss. Lat. F.4, fols 4–33) indicates that Books 2–6 of the *Naturalis historia* circulated together at this time.[11] It may be that Bede had access to a similar selection.[12] From Pliny, Bede drew a diverse assortment of facts that he deployed not only in his scientific writings but also in his exegesis and his historiography.[13] The *Naturalis historia* served as a particularly important mine of information for the composition of *De natura rerum*, although, as we shall see, Bede was happy to correct and tweak the information he found there when he felt it appropriate.

The writer whose influence on Bede's *De natura rerum* is most apparent is Isidore of Seville, not least because one of his works supplied Bede with his title. Isidore's *De natura rerum*, along with another Isidorian work, the *Etymologiae*, provided Bede with many of the ideas and statements that are peppered throughout his text. Isidore drew heavily on Pliny, amongst other pagan sources. Unlike Pliny, however, Isidore was a Christian (and bishop of Seville) and his interpretation of classical science was coloured accordingly. As Isidore himself put it, his *De natura rerum* presented a 'brief sketch' (*breuis tabella*) of information about the nature and causes of things, 'following that which was written by the ancients and especially in the writing of catholic men'.[14] As we have seen in the last chapter, most of the basic axioms of pagan physics were accepted by patristic writers such as Basil and Augustine. Nevertheless, for Isidore, as for those writers, there were a few rigid tenets of Christian orthodox belief that proved problematic: the idea of the waters above the firmament was one prominent example. Pagan ideas that were incompatible with Christianity—such as astrology or the notion that the soul is composed of wind—were explicitly repudiated by Isidore.[15] His writings therefore present a *précis* of classical cosmological learning, shorn of its more troublesome aspects and bolstered with allegorical Christian readings. How this work made its way to the library at Wearmouth-Jarrow is unclear. It was known to both the Leiden Glossator and Aldhelm in the late seventh century in southern Britain, but Bede's copy may well have come by a more direct route.[16] Bede's attitude towards Isidore has been much debated, and scholars have seen in some of Bede's comments an implied criticism of the latter's writings.[17] Recent reappraisals, however, have done away with this view.[18] Isidore's central role as a source for the composition of *De natura rerum* speaks to his importance for Bede as a storehouse of classical and patristic knowledge.

As with all his sources, however, Bede did not hesitate to correct Isidore when appropriate.

Shortly before Bede's day, the writings of Isidore had also been enormously influential on the growth of a distinctive naturalistic tradition among the monastic intellectuals of the Irish-speaking world.[19] These writers had concerns that were different to the concerns of the Church Fathers or the classically trained encyclopaedists of late antiquity, and they reformatted the knowledge they found in Pliny and Isidore in order to further those concerns. The chapter structure of Isidore's *Etymologiae* and *De natura rerum* became the basis for two new and distinct genres of text, the first interested in time and chronology, the second in the physical structure of the cosmos. The first type of text (based more or less on the first eight chapters of *De natura rerum*) became the basis for the computistical manual (one such work, *De diuisionibus temporum*, was known to Bede and used in the composition of his works on time).[20] The second type of text (based on the remaining chapters of *De natura rerum*) became the cosmological textbook, as represented by the anonymous *De ordine creaturarum*. *De ordine creaturarum* was well known to Bede; it provided him with many ingenious updates to Isidore's thought that squared classical science with the tenets of Scripture. Scholars have long known that Bede drew upon *De ordine creaturarum* in the composition of *De natura rerum*, but it was traditionally thought to be a composition of Isidore—only relatively recently, in 1953, was it assigned an Irish monastic provenance.[21] The author of *De ordine creaturarum*, heavily influenced by the writings of Augustinus Hibernicus, presented a cosmological model that accorded with classical thought but had an important shift in emphasis. From the opening line to the last, the role of God the Creator was highlighted as well as his continuing maintenance and governance of his creation.[22] In the pages of *De ordine creaturarum*, the encyclopaedic lore of Pliny and Isidore met the immanent God of Augustine's natural theology. This seventh-century Irish tradition is the immediate backdrop to the composition of Bede's *De natura rerum*, but it has been generally overlooked in recent scholarship on Bede's cosmological thought.

How does Bede's *De natura rerum* fit into this tradition? It is worth noting, first of all, that both *De natura rerum* and *De temporibus* were written to serve as short introductory texts for students: Bede described the two works in later years as 'two short books in a summary style' (*duos libelli stricto sermone*), covering information he thought it important for his students to know.[23] The structure of *De natura rerum* reflects this didactic aim: each chapter is short, clear and to-the-point. Bede did not dwell on any tangled theological questions, such as the issue of the waters above the firmament, as he would do in other works that touched on the same topics.[24] The absence of such discussion has led some scholars to see *De natura rerum* as a work of secular rationalism,[25] but this designation is challenged by the text's overall flavour and structure, which is reflective of the theocentric approach to the natural world found in Bede's patristic and Irish sources.

As a number of scholars have observed, the vision of the cosmos presented in *De natura rerum* is a deeply Christianized one. Bede stressed the role of God as both the Creator of the universe and as the force that powers the ongoing operation of the cosmic machinery, a quality that Charles Jones referred to as 'the powerful Augustinian emphasis upon a God Who *omnia in mensura et numero et pondere disposuit*'.[26] Throughout the work, Bede was anxious to show how the cycles and movements of the natural world emanate ultimately from God's overseeing power.[27] *De natura rerum* opens with a verse epigraph in which Bede addressed the secular philosopher—'you who studies the stars' (*tu qui legis astra*)—and begged them to fix their minds instead on the 'everlasting day' (*perenne dies*).[28] In the first chapter proper, Bede began as he meant to proceed—with a theological primer that drew its argument from Scripture and hexaemeral literature, rather than the encyclopaedic lore of Isidore or Pliny. This chapter is worth quoting in full to illustrate the way in which the cosmological handbook—though it drew on traditions that went back to classical antiquity—had, by Bede's day, become an integrated and entirely Christianized genre.

> *Operatio diuina, quae secula creauit et gubernat, quadriformi ratione distinguitur: primo, quod haec in uerbi dei dispensatione non facta, sed aeterna sunt, qui nos, apostolo teste, ante tempora secularia praedestinauit in regnum. Secundo, quod in materia informi pariter elementa mundi facta sint, ubi qui uiuit in aeternum creauit omnia simul. Tertio, quod eadem materies, secundum causas simul creatas non iam simul, sed distinctione sex primorum dierum in caelestem terrestremque creaturam, formatur. Quarto, quod eiusdem creaturae seminibus et primordialibus causis totius seculi tempus naturali cursu peragitur, ubi pater usque nunc operatur et filius, ubi etiam coruos pascit et lilia uestit deus.*
>
> The divine power, which created and governs all existing things, can be understood in four different ways: First, that all these things were not made but are eternal in the dispensation of the Word of God, who, as the Apostle testifies, predestined us for his kingdom before the times of the world. Second, that the elements of the world were made all at the same time in unformed matter, when he who lives eternally created everything at once. Third, that the same matter is formed into a heavenly and an earthly creation, partly from existing causes, and partly from causes not yet existing, but each thing coming into existence by the distinct workings of the first six days. Fourth, that the temporal constitution of the whole world is brought about in the natural course of things by the seeds and primordial causes of this same creation, wherein the Father and the Son work right up to the present, and God even feeds the ravens and clothes the lilies.[29]

Bede's opening line here has a similar flavour to the opening line of *De ordine creaturarum*, which reads: 'The disposition of the universe must be

understood in two ways'.[30] He may well have had that work in mind or even had it in front of him as he wrote. The details of the rest of the chapter, however, were drawn from elsewhere, specifically a passage from Augustine's *De Genesi ad litteram*.[31] It is telling that Bede explicitly referenced the Augustinian notion that the cosmos functions through the 'seeds' and 'primordial causes' formed by God at creation. As we have seen, this understanding of natural law was popular among late antique and early medieval natural philosophers, and represents an entirely different conception of nature to that found in later medieval and modern thought.[32] After this, in Chapter 2, Bede proceeded to explain how the universe came to be, discussing each day of creation, in turn. Again, the continuing role of God as *gubernator* of the cosmos was emphasized: on the seventh day, God rested, explained Bede, 'not from the governance of creation, since in him we live, and move, and are, but from the creation of new material'.[33]

Only after having established this backdrop—and having set the entire work within the context of the Creator and his creation—did Bede move on to define what the universe (*mundus*) actually is (Chapter 3), and to explain the four elements (Chapter 4). The information presented in these chapters had not changed in any great degree from classical antiquity, but it had been set within a new framework. That this represents a significant development from Isidore's writings has been noted by scholars: Bede emphasized the creation and God's continuing role in the governance of that creation to an extent far beyond what we find in his continental predecessor.[34] The remaining chapters of *De natura rerum* are arranged more or less in descending cosmic order: beginning with chapters on the firmament and the upper heaven, followed by the stars and the planets, the zone of air, the zone of water and the zone of earth. On this basic structure, Bede was able to hang excursuses on topics such as solar and lunar eclipses (Chapter 22), the signs of the Zodiac (Chapter 17) and the division of the earth into three continents (Chapter 51).

Bede's cosmographical model

In *De natura rerum* Bede presented a traditional image of the structure of the universe that was not to be superseded in any way in his later writings (though, as always, he continued to refine and correct his understanding when appropriate). In the fourth chapter of that work, he explained the essential details of elemental theory—one of the foundational constituents of classical cosmography—with succinct clarity.[35] He began by noting that the elements differ from each other by property (*natura*) and by position (*situs*). The latter quality was explained, as it often is, by analogy with weight. Earth (*terra*), the 'heaviest' of the elements, naturally seeks its home in the centre of the *mundus*: 'it occupies the innermost place in creation'.[36] Water (*aqua*) is lighter than earth, but still heavier than the other two elements—it therefore rests in its natural place just above earth. Above water comes air (*aer*)

and, above that, fire (*ignis*). The natural *situs* of air was illustrated by Bede with an example from everyday life borrowed from *De ordine creaturarum*: he noted the fact that, if a vessel full of air is held under water, the air will immediately rise to the surface (in the form of bubbles). Fire similarly seeks to return to its proper place: Bede explained how, when a fire is kindled, the flames immediately seek to return to their proper seat (*sedes*) above the air. Fire cannot prosper in the 'soft' air that occupies this area of the cosmos, however, and the flames soon dissipate into the atmosphere. This idea—that flames never actually reach their proper location but are diffused into the air—was wholly derived from the deductions of the anonymous author of *De ordine creaturarum*.[37] Despite the clear differences between them, the elements are, said Bede, mingled with each other through a kind of 'kinship' (*propinquitas*).[38] In other words, each element has some traits in common with some other element: earth is dry and cold, water is cold and moist, air is moist and hot, and fire is hot and dry. This observation was derived from Ambrose's *Hexameron*, perhaps via Isidore.[39] For Ambrose, this elemental interconnectedness had been a way of emphasizing the concord and order that exists among the elements. Bede, however, took Ambrose's idea further: he saw the intermingling of the elements as the reason why we see 'fire in the earth' (*ignis in terris*)—presumably he had in mind volcanoes—and 'clouds and corporeal bodies in the air' (*in aere nubila terrenaque corpora*). As always, Bede was not content to mindlessly repeat the information he found in his sources, but modified and improved upon it until he was satisfied that it accorded with his own sense of the world.

Thanks to varying usages in different traditions, the cosmological terminology available to Bede was often unclear. Bede did his best to make it comprehensible to his readers: he explained, for instance, that the term *mundus* can refer to the entire universe (including both heaven and earth) or it can refer to heaven alone.[40] The term *caelum* ('heaven') could be particularly confusing as it could refer to any one of three different areas of the universe: the spiritual heaven, the part of the corporeal universe above the moon (the realm of the planets and the fixed stars) or the lower atmosphere around the earth. In this study, I have elected to assign three separate titles (derived from Bede's own terminology) to these three different heavens, in the hope of making things clearer for the reader. The highest heaven, which is the spiritual heaven, I will refer to as the *caelum superius*. The lower heaven, which encompasses all of creation from the stars down to the earth, I will refer to as the *caelum inferius*. The atmosphere around the earth, meanwhile, I will refer to as the *aer*.

Despite these problems of terminology, *De natura rerum* provided its readers with a remarkably clear picture of the cosmic structure and the different levels of which it is comprised:

1 Uppermost, and furthest from the earth, is the *caelum superius*, the spiritual heaven. Bede did not go into much detail about this heaven in

De natura rerum, but he did provide his readers with the following brief details: the *caelum superius* is located above the firmament, at an equal distance in all directions from the earth at the centre; it is the dwelling place of the 'angelic powers' (*uirtutes angelicae*).[41] I will return to the topic of Bede's conception of the *caelum superius* in Chapter 7.

2 Below the *caelum superius* lie the waters above the firmament, 'lower indeed than the spiritual heavens but still higher than all of corporeal creation'.[42] Bede followed tradition in ascribing a cooling function to these waters: 'God tempered this heaven with icy waters lest it set fire to the lower elements'.[43] He made note of a competing theory—that the waters above the firmament were released during the Flood—and dismissed it as incorrect.[44]

3 Below the *caelum superius* and the supracelestial waters is the *mundus*. This is the corporeal part of God's creation. In his opening discussion of the cosmic structure, Bede presented a *mundus* of two parts: it is divided between heaven (*caelum*) above and earth (*terra*) below. The *caelum* referred to in this case is the lower heaven, the *caelum inferius*; the higher, spiritual heaven is not part of the *mundus*. The four elements are the core ingredients of the *mundus*, according to Bede. Indeed, he presented an image of the *mundus* as an inter-connected and vibrant network of elements. The universe is formed, he said:

> *igne, quo sidera lucent; aere, quo cuncta viventia spirant; aquis, quae terram cingendo et penetrando communiunt; atque ipsa terra, quae mundi media atque ima, librata volubili circa eam universitate pendet immobilis.*
>
> from fire, by which the stars shine; from air, by which all living things breathe; from the waters, which barricade the earth by surrounding and penetrating it; and from earth itself, which is the middle and lowest portion of the *mundus*, and which hangs suspended, motionless, with the universe whirling around it.[45]

All of the following realms are part of the *mundus*.

4 3a) The *firmamentum* is at the outer limit of the *mundus*, immediately below the supracelestial waters. This is the vault of the sky, a solid firmament in which are fixed the stars. Its presence—inferred from Scripture—is perhaps the most significant change to the classical model of the physical universe. Given its proximity to heaven and distance from the earth it is unsurprisingly 'of a fine and fiery nature' (*subtilis igneaeque naturae*).[46] Those parts of the *mundus* immediately below this vault were also often referred to as the *firmamentum*.

5 3b) Below the *firmamentum* is the *aether*. This is a rarefied realm, associated with the element of fire, where 'all is clear and filled with the light of day'.[47] It extends from the *firmamentum* all the way down to the orbit of the moon, taking in the seven planets. They are, in order: Saturn, Jupiter, Mars, the sun, Venus, Mercury and the moon. Though Bede was not

explicit about it, we should understand that the fire that fills this region is quite different to its terrestrial cousin—the fire of the *aether* is purer and more refined than that found on earth.[48]

6 3c) The area below the moon is the *aer*, associated with the element of the same name. This is where the fallen angels reside, having been hurled down from heaven. The *aer* is further divided into two parts: the upper part is associated with the *aether*, the lower part with the earth. The former is closer in character to the *aether*, fine and luminous; the latter is murkier and more chaotic—here are found fire, hail, snow, ice and stormy winds. Bede, like Isidore, Augustine and many other Christian authors, was in the habit of referring in his writings to the 'region(s) of this *aer*' (*spatium/spatia huius aeris*), a phrase that frequently loses its cosmographical significance in modern translations, where it is often simply rendered as 'the air' or something similar. When Bede referred in a homily to 'all the regions of this *aer*' (*uniuersa aeris huius spatia*),[49] or in an exegetical text to 'all the turbulent regions of this *aer*' (*cunctis aeris huius turbulenti spatiis*),[50] he had this zone of the cosmos in mind.

7 3d) Finally come the zones of water and earth, respectively, though, as we shall see, these two realms interpenetrate each other and have no clear boundary. The word *terra* could refer simply to the element of earth or to the world as a whole (i.e. to the earth and water combined).

This classical cosmic structure of descending elemental spheres served to explain much about the workings of the universe. But it also raised some questions. If the innermost sphere was the sphere of earth and the second sphere was that of water, how was it that dry land existed at all? Shouldn't the earth be entirely covered by the waters?[51] On a related note, how was it that the Ocean did not continue to grow and grow, given that water from the rivers and streams continued to flow downwards from the mountains into the seas?[52] One answer to the first two of these questions was that neither the sphere of earth nor the sphere of water was in fact perfectly spherical. Instead, the two elements formed an interwoven lattice: the earth was pulled up above the level of the water in some places, while water flowed through the earth through a large network of subterranean tunnels. As Pliny put it, the 'maker of nature' (*artifex naturae*) had arranged it so that earth and water 'were united in a mutual embrace' (*mutuo inplexu iungerentur*).[53] A common theme of Roman hydrology was the image of an earth riven with underground channels and waterways, dubbed 'veins' through analogy with the human body.[54] Pliny was aware of the process of precipitation but did not think it consequential enough to be a likely explanation for the origins of springs. Instead, he thought that springs were born from this subterranean water, which was forced up through the underground 'veins' by the 'weight of the earth' (*terrae pondus*).[55] This idea clearly appealed to Bede, who adopted it wholesale from Pliny, taking care only to Christianize the reference to nature's creator.[56] Earth and water, according to Bede, 'were

joined in a mutual embrace, with the one opening her bosom and the other permeating the whole, within, without, above, below, by means of veins running throughout like bonds, and even bursting out in the highest mountain ranges'.[57] This image, of 'veins' of water running through the earth, became for Bede something as certain and fundamental to his understanding as elemental theory or the geocentric cosmic spheres—a basic assumption upon which many other premises could be built. In a discussion of the eruption of new rivers and streams after earthquakes,[58] for instance, Bede commented, 'no one who intelligently observes that the earth is full of innumerable veins of water, just as the human body is full of veins of blood, doubts that this can happen'.[59]

Taken together, then, the two elements of earth and water did form a sphere. True, it was not quite a perfect sphere, thanks to the great disparity in height between the lowest and highest points on earth, but it was a sphere nevertheless.[60] This sphericity is clear, Bede said, from the way in which those in the northern part see different stars to those in the south—the Troglodytes and the Egyptians, for instance, cannot see the *Septentriones* (Ursa Major and Ursa Minor).[61] Bede also adhered to the commonly held belief that the habitable earth is divided into three distinct land masses—Asia, Africa and Europe—which are surrounded by the immense Ocean. Asia is equal in size to the other two continents together.[62] Africa, being closer to the band of the equator, is hotter and has longer days than Northern Europe, which is much further from the equator. Bede noted that the human population is restricted by the heat in the south and the cold in the north. Like other ancient geographers, he understood that the band of the equator was so hot as to be impassable.[63] He also understood that the movements of the sun had a practical purpose: allowing its heat to be distributed relatively evenly across the earth. If the sun was fixed in place, one area would be destroyed by the heat while others would be too cold.[64]

The cosmographical model outlined above was a powerful explanatory engine that enabled Bede to account for many natural phenomena—this can best be illustrated with some examples from *De natura rerum*. Bede discussed lightning in a chapter that represents a melange of Isidore and *De ordine creaturarum*.[65] Lightning, said Bede, is a form of the element fire. Seeing as how fire on earth can be caused by the striking together of any two things (in other words, fire can be produced from striking flints together or rubbing wood against wood), Bede (following Isidore) concluded that lightning is generated when clouds clash against each other.[66] Yet this theory has an obvious deficiency: lightning looks quite different to the fire that can be observed on earth. This, said Bede, is because the fire of which lightning is made is of a different sort to the fire found on earth: originating as it does from a more lofty position in the cosmic structure, nearer to the *aether*, it is a 'more subtle' (*subtilior*) kind of fire and its 'power to penetrate' (*uis ad penetrandum*) is greater than any earthly flame.[67] In a different chapter, Bede explained how earthquakes occur. They are caused, he said, by wind

which has been shut up in the 'veins of the earth' (*terrae uenae*) and which labours to escape from there to its proper realm (the *aer*), thus causing the earth to shudder and shake.[68] There were a number of competing earthquake theories in antiquity.[69] Pliny was a proponent of the idea that tremors were caused by air trapped in subterranean caverns[70]; Isidore, though he clearly leaned towards this idea as well, equivocated between it and a different water-based solution.[71] Bede omitted any reference to water as a cause of earthquakes, however, preferring to stick with the idea that earthquakes arise from the interaction of the air with the earth—partially, no doubt, because it was a better fit with the Plinian notion of the 'veins of the earth' to which he was attached (water *is* affected by earthquakes, however, as the vacuum left by the escaping air often has the effect of pulling water from the sea in towards the land).[72] Finally, the layered elemental cosmos could also serve to explain celestial phenomena. In a short aside in his chapter on stars, Bede noted that we sometimes see what appears to be a 'wandering star' (*uagum sidus*) in the night sky—such phenomena are not, in fact, stars at all but 'little sparks fallen from the *aether* [and] carried along by the winds' (*igniculos ex aethere lapsos portari uentis*). Naturally, this kind of thing occurs more readily whenever the wind is particularly strong.[73] The ordered elemental cosmos, then, was a robust and versatile concept that could be used to satisfactorily explain many aspects of the natural world. Bede's implicit acceptance of its validity undergirded his discussions of nature and cosmos not just in *De natura rerum* but throughout his career. We shall see in future chapters how the order and disposition of the elements allowed Bede to explain the mechanics of such phenomena as the creation of the cosmos, the activities of angels and demons and the destruction of the world.

Because of Bede's aims in writing, *De natura rerum* can sometimes appear deceptively 'rationalist'. His desire to present concise information for students meant that Bede left out much information that we might have expected him to include. Often the information left out was theological or spiritual. This has led some scholars to conclude that Bede was concerned to keep his theology distinct from his science—an exceptionally modern attitude. Thomas Eckenrode, for instance, thinks it significant that Bede did not mention the 'diabolical origin of storms' in his scientific works.[74] According to Eckenrode, the reason for these omissions was that

> as a man who believed in independent thinking, Bede … held the position that natural phenomena have their origins in natural causes and, therefore, one must explain natural happenings in terms of the laws of nature. In attributing appearances and events of nature, to its own laws, Bede did not theologize or mythologize his scientific explanations.[75]

Even Calvin Kendall and Faith Wallis are of the opinion that Bede deliberately omitted theological information as part of a rationalizing agenda (for instance, they point to the fact that Bede discussed the causes of rainbows

without reference to the rainbow's importance as a sign from God).[76] It is clear, however, that Bede by no means excluded 'supernatural' elements from his account of the cosmos in *De natura rerum*. We read in Chapter 24, for instance, that comets are produced suddenly, 'portending a change of royal power or plague or wars or even winds or strong heat'.[77] There was plenty of other information on comets in Pliny's *Naturalis historia* that Bede could have used, were he inclined to avoid 'superstitious' interpretations—instead he selected the fact that comets can act as portents as an important fact worth knowing. His decision not to refer in *De natura rerum* to the importance of the rainbow as a divine sign is unlikely to have been prompted by any rationalist sensibility. Not too much later, in fact, in his commentary on Genesis, Bede would happily discuss the rainbow as both a sign from God *and* a phenomenon with explainable causes.[78] An erroneous assumption underlies the argument made by Eckenrode: the assumption that in Bede's comprehension natural causes and theological meaning were mutually exclusive. In fact, as we have seen, late antique and early medieval Christian cosmologists, following Augustine, emphasized the *semina* of God at work in the natural world. For Bede, there was no part of nature that was in some sense independent of God's power, and thus no essential difference between 'natural' and 'miraculous' explanations: both co-existed with no logical dissonance. As shall be discussed at greater length in later chapters, Bede understood that phenomena could be caused by natural forces and at the same time could possess a divine significance. Far from being a work of rationalism, *De natura rerum* presented a universe in which all natural phenomena owed their origin directly to the divine power of an immanent Creator—a Creator who, right up until the present, 'even feeds the ravens and clothes the lilies'.[79]

Excursus: *De natura rerum* in an Insular context

In recent scholarship on *De natura rerum*, the emphasis has generally been on Bede's innovative approach to natural science and his radical reformatting of Isidorian material. Scholars have tended to underplay the immediate Insular context in which Bede was writing. In particular, there tends to be little time devoted to discussing the influence of *De ordine creaturarum*. Kendall and Wallis, in the introduction to their translation of *De natura rerum*, provide detailed discussion of Isidore's influence only.[80] Tinelli, in the introduction to her translation, dedicates 11 pages to Pliny, 9 to Isidore, 5 to Augustine but less than 3 to *De ordine creaturarum*.[81] Immo Warntjes has recently made the case that Bede's reputation as an innovator in the field of computistics has meant that the wider Insular contribution to that field has been more or less ignored:

> hardly ever is [Bede's] work discussed in context, and it has almost always been overlooked that Bede stands at the end of a tradition of

> intense scholarly research in computistical questions undertaken in Britain and Ireland, most prominently in the *regiones Scottorum*, in the seventh century.[82]

I believe that we can extend this point to Bede's cosmological writing as well. *De natura rerum* is probably best understood as a late manifestation of an Insular cosmological tradition that flourished in the seventh century (encompassing Augustinus Hibernicus and *De ordine creaturarum* and numerous computistical works), but Bede's reputation as an original and singular thinker has tended to obscure this context.

A recent introduction to Bede's science by Faith Wallis—representative, I think, of the tenor of current scholarship on the subject—provides a useful jumping-off point for my argument. Wallis characterizes Bede's achievement in writing *De natura rerum* thus:

> Bede's *On the Nature of Things* … challenged Isidore's work in three ways. First, Bede abandoned Isidore's structure; he detached the chapters on time, and relocated them in *On Times*. Secondly, he corrected and improved Isidore with passages from Pliny. Thirdly, and most importantly, he reconceptualized the notion of Christian cosmography. Where Isidore was content to tack biblical parallels onto essentially Graeco-Roman material, Bede wanted to demonstrate how the Christian understanding of creation and classical science constituted a coherent account of a created cosmos.[83]

This characterization rather flattens out the immediate context of Bede's writing and presents an image of Bede as an innovator and 'great man' working in a cultural vacuum. Let us take Wallis's three claims, in turn. Firstly, we are told that Bede detached the chapters on time from Isidore's work and relocated them to *De temporibus*, creating two genres out of one. Indeed, the composition of two separate texts where Isidore had one has generally been seen as an innovation on Bede's part.[84] However, as we have seen, this is in effect what the Insular works read by Bede had already done—*De diuisionibus temporum* inheriting the chapters on the divisions of time, *De ordine creaturarum* the chapters on the universe, the earth and celestial and natural phenomena. It must have seemed quite natural for Bede to split his books in this way, as this is what his sources had done.

Wallis also notes that Bede corrected and improved Isidore's text with passages from Pliny. Isidore and Pliny were certainly quoted an impressive amount by Bede in the composition of *De natura rerum*. Bede's use of *De ordine creaturarum* was not insignificant, however—though this may not be immediately obvious from a glance at the list of citations in editions.[85] In some chapters of *De natura rerum*—such as those on rain, hail and snow—we are able to observe Bede busily at work, weaving together a coherent discussion from information drawn from all three works. There is a sense

that Bede treated all three sources as equally useful mines of information, not privileging any one text over the others. Discussing rains (*imbres*), Bede began:

> *Imbres ex nubium concreti guttulis, dum in maiores stillas coeunt, aeris amplius non ferente natura, nunc uento impellente, nunc sole dissoluente pluuialiter ad terras dilabuntur.*
>
> Rains are formed from the little drops of the clouds. As they coalesce into bigger drops, no longer supported by the nature of the air, sometimes driven by the wind, sometimes dissolved by the sun, they fall down in the form of rain to the earth.[86]

This was a rearrangement of the information he found in *De ordine creaturarum*.[87] He followed this with a sentence derived from Isidore's *Etymologiae*: 'But we call gentle and steady rains "showers" and sudden and violent ones "storms"'.[88] In the next chapter (*De grandine*), he opened with another sentence from *De ordine creaturarum*, 'Hailstones are coagulated in the air from drops of rain, and frozen by the harshness of cold and wind',[89] and supplemented it with further information, this time drawn from Pliny: 'But they are melted more quickly than snow, and they fall more often during the day than at night'.[90] *De ordine creaturarum*, though it does not surpass Pliny or Isidore's writings in frequency of citation, was certainly a significant source for Bede and often provided him with explanations for phenomena that he would not have been able to find elsewhere.

Thirdly, Wallis argues that Bede 'reconceptualized the notion of Christian cosmography', by creating an integrated Christian view of the cosmos. According to her, Isidore's work was 'essentially Graeco-Roman material' with some biblical parallels tacked on. Again, this achievement of Bede had surely already been accomplished: *De ordine creaturarum* had presented a view of the cosmos that centred the Creator and the creation.[91] Its structure reflected this concern: it was laid out according to a deliberate plan, reflecting Christian themes. It opened with creation and then described, in turn, the celestial realm, the waters above the firmament, the firmament itself and the earthly world, ending with a discussion of the 'new heaven and new earth' (Rev 21:1) to come at the end of time. The idea of opening a work of cosmology with reference to God's creation and continual oversight of the cosmos, then, does not properly belong to Bede, though he certainly refined it. The final chapter of *De ordine creaturarum*, which cast its eye forward to Judgement Day and the end of the world, seems to also have influenced Bede in his composition of the final apocalyptic chapters of *De temporum ratione*.[92]

I do not wish to overstate the importance of *De ordine creaturarum* as an influence on Bede's cosmological understanding. He was as critical in his use of it as he was with Pliny and Isidore. And Isidore was still, in many ways, Bede's most important source, from which he derived much of his

chapter structure and information. In comparison with Isidore's *De natura rerum*, *De ordine creaturarum* is much less of a focussed work. It includes frequent digressions on theology, exegesis and other topics. Bede, in making use of it, tidied up these loose ends and rearranged the material in a more straightforward manner. He clearly found the structure of Isidore's text more congenial as a basis for his own handbook. Nevertheless, *De ordine creaturarum* provided Bede with an important perspective—and it is the only one of his sources to do so: a cosmological vision in which the Creator and his continued governance of creation were placed centre-stage. Although Bede was an intelligent and often innovative thinker in the realm of natural philosophy, he was not the only such person in the early Insular world and Bede's cosmological writings must be understood in their immediate intellectual context.

Nor should we be too quick to detect the influence of Irish texts where none may exist. 'On the seventh day God rested', wrote Bede, 'not from the governance of creation (*gubernatio creaturae*), since in him we live, and move, and are, but from the creation of new material (*sed a nouae substantiae creatione*)'.[93] Kendall and Wallis are of the opinion that this phrase 'has no traceable source', but they speculate that the vocabulary used may indicate a familiarity on Bede's part with the *De mirabilibus sacrae scripturae* of Augustinus Hibernicus.[94] They note that 'it bears a striking resemblance to the notion of providence as extended creation' found in the latter work.[95] Augustinus's text utilized similar vocabulary about God's 'governance' (*gubernatio*) and emphasized the same idea: that God did not cease to govern on the seventh day.[96] In fact, Bede and Augustinus were both drawing on the same sources: Augustine of Hippo, whose *De Genesi ad litteram* invoked similar ideas, and Junillus Africanus's *Instituta regularia diuinae legis*. This latter text was extremely popular in the early medieval Latin West; it has survived in at least 16 manuscripts of English or Frankish provenance and was known to Aldhelm in the late seventh century.[97] In fact, a partial copy of the text (comprising *Instituta* 1.9–2.17 and 2. 22–4) survives in the one of the earliest extant manuscripts from medieval Britain, BL Cotton Tiberius A. xv, fols 175–80, possibly written at Malmesbury in the early eighth century.[98] That Bede knew Junillus's text and drew on it for some passages in *De natura rerum* has long been known.[99] But the deeper influence of Junillus on Bede's vision of creation has not generally been recognized.[100] In Junillus's work the question of God's 'rest' on the seventh day is addressed:

> *Septima die requievisse dicitur deus non a creando, quippe cum cotidie ex eius dispensatione ac providentia omnis creatura renovetur aut constet, sed hoc significatum est, quod post illos sex dies nullam mundo incognitam substantialem speciem aut naturam novam inexpertamque creaverit.*

> On the seventh day God is said to have rested, not from creating, inasmuch as daily from his dispensation and providence all creation is renewed or maintained, but this has been indicated: that after those six

> days he created no kind of substance unknown to the world, or nature new and untried.[101]

This passage, shortened and rearranged, gave Bede much of his vocabulary for the discussion in *De natura rerum*. He added a well-chosen scriptural quotation—Acts 17:28: 'for in him we live, and move, and are'—to replace Junillus's line about God's dispensation. *Gubernatio*, meanwhile, was a term commonly used by Junillus throughout the work to describe God's providence. We need, therefore, look no further for the source of this sentiment in Bede's work. Augustinus Hibernicus did exert an influence on Bede at second hand as many of his ideas were repeated in *De ordine creaturarum*, but it seems to me unlikely that Bede was directly familiar with *De mirabilibus*.

Later addenda to Bede's cosmographical model

Bede returned to the subject of the cosmic structure in his great work of time-reckoning, *De temporum ratione*, which was composed over two decades after *De natura rerum*. In *De temporum ratione*, the centrality of elemental theory to Bede's cosmology was once again demonstrated; the same axioms that Bede understood to be true in 703 continued to undergird his cosmology in 725. Written as an expansion of *De temporibus*, *De temporum ratione* was not centrally concerned with revising the information provided in *De natura rerum*, but in a number of places Bede did deem it necessary to expand on some topics related to cosmography. He took the opportunity in Chapter 2 of the later work—in the context of a discussion of time and the rotations of the planets—to attack the pagan idea of Nature as something independent of God's providence: He wrote:

> *quae natura non iuxta ethnicorum dementiam dea creatrix una de pluribus sed ab uno uero deo creata est, quando sideribus caelo inditis praecepit ut sint in signa et tempora et dies et annos.*
>
> This "Nature" was created by the one true God when he commanded that the stars which he had set in the heavens should be the signs of seasons, days and years; it is not, as the folly of the pagans asserts, a creating goddess, one amongst many.[102]

In other words, nature was not a separate entity, independent of God—an understanding which would have threatened Bede's conception of divine immanence.[103]

A feature of the cosmology of *De temporum ratione* that was not present in *De natura rerum* is the theory of the humours. Bede's purpose in including this information in *De temporum ratione* was to link the four humours with the four seasons and the four elements, and thereby to demonstrate the overarching order that lies behind the universe, both spatially and temporally. The idea is an ancient one, as we have seen, and Bede's contribution did not

deviate significantly from previous iterations of the theme. The seasons, like the elements, each possess certain interconnecting qualities: winter is cold and wet, spring is wet and warm, summer is warm and dry, and autumn is dry and cold. Not only that, but man himself, 'who is called by the wise "microcosm"—that is, "smaller universe"' (*qui a sapientibus microcosmos, id est minor mundus, appellatur*), reflects these qualities as well.[104] Each of the humours reflects the qualities of the season in which it prevails: red bile, for instance, increases in summer and is hot and dry. Each humour also corresponds to one of four divisions of age: red bile is most active in adolescents. The particular balance of humours in an individual also influences their personality: red bile makes people 'lean, even though they eat a lot, swift, bold, irritable and agile'.[105] Because of this correspondence, the human body can be affected by seasonal change. Between the 8th of May and the 24th of June, for instance, red choler is on the rise. For this reason, during this period, one should eat sweet foods and drink wine, but refrain from sex and fasting.[106]

As the lunar calendar was central to any discussion of Easter reckoning, Bede devoted a number of chapters of *De temporum ratione* to the moon, in the course of which he revealed some further information about his understanding of the *mundus*. In Chapter 26, Bede explained that the moon is lower in the universe than the sun (in other words, it is closer to the earth) and is in fact the lowest of all the planets: the moon, as he put it, 'travels along the boundary between this turbulent *aer* and the pure *aether*'.[107] In a famous passage, Bede drew an analogy with lamps hanging from the ceiling of a church building in order to explain how the moon sometimes appears to be higher than the sun.[108] Much has also been made of Bede's discussion of the moon's influence on the tides in Chapter 29 of *De temporum ratione*.[109] Less commented upon, however, is the chapter before this, in which Bede explained how the moon was liable to affect all of the elements, not just water. He claimed that the changing size of the moon has a corresponding effect on the elements. As the moon shrinks and grows, the 'humid brains of sea animals' (*animantium cerebra maritimarum humida*) shrink and grow with it. Oysters, likewise, grow larger with the moon, and the 'inner parts of trees' (*arborum internae*) undergo a similar fluctuation.[110] Bede borrowed this notion from Ambrose's *Hexaemeron*,[111] but he also backed it up with evidence derived from his wider reading. Reproducing a fact from the *Epitoma rei militaris* of Vegetius, he claimed that architects teach that wood for building be taken from trees felled between the 15th day of the moon and the 22nd.[112] This, said Bede—drawing a characteristic connection between two hitherto-unrelated bits of information—is because those architects are aware of the moon's influence on trees and adjust their felling seasons accordingly. The moon is also liable to affect the 'movements' (*motus*) of the *aer*, said Bede (following an argument made by Basil): after a period of good weather, a new moon can precipitate 'cumulations of clouds' (*nubium glomerationes*) and 'disturbances' (*perturbationes*).[113] It even causes sand

banks to move. In Bede's account, the reason for the moon's power over the elements is not quite clear; borrowing a phrase from Ambrose, he spoke of 'certain exhalations' (*quaedam aspirationes*) of the moon that drag the ocean forward, but he did not offer anything more in the way of explanation.[114] Behind all of this lies the ancient Stoic idea that the moon emanates a powerful pull on those elements that lie below it in the cosmic hierarchy, causing the *aer* and the water to swell and contract and leading to a number of phenomena routinely observable on earth,[115] an extremely popular theory that Bede would have found described not only in Ambrose and Basil but also in Pliny, Isidore and Augustine.[116]

One of the topics alluded to in *De natura rerum* and expanded upon in *De temporum ratione* is the nature of light and darkness in the *mundus*. In Chapter 7 of the latter work, he explained it as follows:

> *Nam quoniam pro conditionibus plagarum quibus solis cursus intenditur et splendorem eius a nobis obiectio terrenae molis excludit, inumbratio illa quae noctis natura est ita erigitur ut ad sidera usque uideatur extendi … Quam uidelicet umbram noctis ad aeris usque et aetheris confinium philosophi dicunt exaltari, et acuminatis instar pyramidum tenebris lunam, quae infima planetarum currit, aliquando contingi atque obscurari, nullumque aliud sidus taliter eclipsim, hoc est defectum sui luminis pati, eo quod circa fines telluris solis splendor undique diffusus, ea libere quae telluri procul absunt aspiciat; ideoque aetheris quae ultra lunam sunt spatia diurnae lucis plena semper efficiat, uel suo uidelicet uel siderum radiata fulgore. Et quomodo nocte caeca procul accensas faces intuens circumposita quaeque loca eodem lumine perfundi non dubitas, tametsi tenebris noctis obstantibus non amplius quam solas facium flammas cernere praeualeas, ita, inquiunt, purissimum illud et proximum caelo inane diffusis ubique siderum flammis semper lucidum fit; sed praepeditis aere crassiori nostris obtutibus sidera quidem ipsa luce radiantia parent, uerum reddita ex eis illustratio non paret.*
>
> Because the interposition of the Earth's mass blocks the Sun's splendour from us according to the location of the regions through which his path passes, that shadow which is the very essence of night is projected so far upwards that it appears to reach to the stars … Philosophers say that this shadow of night extends upwards to the frontier between the *aer* and the *aether*, and that the Moon, the lowest of planets, is occasionally touched and obscured by the shadow as it comes together into a point like a pyramid. No other heavenly body undergoes an eclipse, that is, the loss of its light, in this fashion, because the sunlight, diffused everywhere around the confines of the Earth, shines without impediment on those [stars] which are at a great distance from the Earth. Therefore [the Sun] makes the tracts of *aether* which are beyond the Moon to be always full of daylight, either by his own brightness or by that which

> beams from the stars. Just as when, on a dark night, you are positioned at a distance from some blazing torches and you see some of the surrounding area suffused with their light, although the darkness of night is all about, and all you can see are the separate flames of the torches themselves—by the same token, they say that the empty space which is purest and closest to heaven [i.e. the *aether*] is always lit up by the light of the stars, scattered everywhere. But to our vision, impeded as it is by the thicker aer, the stars appear themselves to be shining with light, but the dazzling brightness which they radiate is not obvious.[117]

It is worth pausing in order to take in the full implications of this extract. As Faith Wallis has phrased it: 'few passages convey in a more striking manner the immense difference between the medieval view of the universe—all brightness and order, with Earth as the one dark spot—and our modern perceptions'.[118] For Bede, as for all medieval Christians, the temporal world was a fallen world—the 'sump-hole of the universe', in Peter Brown's memorable phrasing.[119] But in cosmic terms, the dark and shadowy globe of the earth was an aberration—an unrestrained and all-encompassing light was the natural order of things in the realms above the moon. The fact that the world was shrouded in obscurity reflected an important religious truth about the nature of human existence, but the *physical* explanation for this state of affairs was provided by classical elemental theory.

Overall, *De temporum ratione* speaks to the ease with which Bede was able to exploit and renovate the axioms of classical physics. He was able to present a complex and internally consistent vision of the cosmos and its physics that also accommodated Christian belief and theology. It was a complex understanding that reflected not only Bede's learning but also his ability to innovate and invent within the bounds of tradition. We shall see in further chapters how these skills would stand him in good stead in his other scholarly projects.

Conclusion

The cosmic model presented by Bede in *De natura rerum* was the foundation for much of his later theological and cosmological speculation. Although it is an early work, lacking the sophistication of his later writing, the ideas presented in it were central to Bede's worldview and their importance was felt throughout his career. It is significant that he never revised or walked back any of the opinions that he expressed in its pages—though, in *De temporum ratione*, he did provide some few addenda to this cosmographical model, the most significant of which was an excursus on the importance of the humours and their link with the elements and seasons. In some of the works that Bede composed after *De natura rerum*—but still relatively early in his career—we do find him indulging in some cosmological theorizing that he would come to abandon as too speculative. But he never

questioned any of the fundamental principles of *De natura rerum*. These principles would provide him with the tools to speculate and hypothesize on complex philosophical and theological questions. A recurring theme in the chapters to come will be the way in which Bede used elemental theory and the classical cosmic model to explicate Scripture and to clarify points of theology. In doing so, he demonstrates the coherence and internal consistency of this model of the cosmos and its laws. This use of cosmology to clarify the events of sacred history was not the focus of any one of Bede's works; instead it is a thread that runs through almost all of his writings. As we shall see, it lies behind Bede's understanding of everything from the creation of the universe to Judgement Day, from the events of Scripture to the miracles of contemporary saints.

Notes

1 See recently O'Brien, *Bede's Temple*, 74, drawing on M. Smyth, *Understanding the Universe in Seventh-Century Ireland* (Woodbridge, 1996), 271–9; and the remarks in my review of the former in *The Journal of Theological Studies* 67 (2016), 836–8.

2 As we have seen, Augustine had taken as a given Moses's knowledge of elemental theory (above, Chapter 1). Bede would follow suit.

3 For discussion, see Kendall and Wallis, *Bede: On the Nature of Things and On Times*; Elisa Tinelli, *Beda il Venerabile: De Natura Rerum*, Biblioteca della Tradizione Classica 6 (Bari, 2013); E. Ahern, 'Bede: De Natura Rerum', in R. Dance and H. Magennis (eds), *The Literary Encyclopedia: Anglo Saxon England, 500–1066* (2016), <https://www.litencyc.com/php/sworks.php?rec=true&UID=9640>.

4 We know from internal evidence that *De temporibus* was completed in 703; its sister volume was presumably published in the same year; cf. Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 2, 188–90.

5 Wallis, *Bede: The Reckoning of Time*; Kendall and Wallis, *Bede: On the Nature of Things and on Times*.

6 C.W. Jones, *Bedae Venerabilis Opera de Temporibus* (Cambridge, MA, 1943); C.W. Jones, *Bedae Venerabilis Opera Didascalica*, CCSL 123B (Turnhout, 1977); C.W. Jones, 'Some Introductory Remarks on Bede's Commentary on Genesis', *Sacris Erudiri* 19 (1969), 115–98; C.W. Jones, 'Manuscripts of Bede's "De Natura Rerum"', *Isis* 27 (1937), 430–40; Eckenrode, 'The Venerable Bede as a Scientist'; Eckenrode, 'The Growth of a Scientific Mind'; Eckenrode, 'The Venerable Bede's Theory of Ocean Tides'; Stevens, *Bede's Scientific Achievement*; Di Pilla, 'Cosmologia e uso delle fonti nel "De natura rerum" di Beda', *Romanobarbarica* 11 (1991), 129–47; Wallis, 'Reframing Bede's "Science"'; Wallis, 'Caedmon's Created World'; Wallis, 'Bede and Science'.

7 Tinelli, *Beda il Venerabile: De Natura Rerum*.

8 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 191–2; Tinelli, *Beda il Venerabile: De Natura Rerum*, 147–57.

9 Tinelli, *Beda il Venerabile: De Natura Rerum*, 157.

10 Bede, *DTR* 27 (ed. Jones, CCSL 123B, 362); cf. *DTR* 31 (Jones, CCSL 123B, 377); 34 (Jones, CCSL 123B, 390).

11 M. Garrison, 'An Insular Copy of Pliny's *Naturalis Historia* (Leiden VLF 4 fols 4–33)', in E. Kwakkel (ed.), *Writing in Context: Insular Manuscript Culture 500–1200* (Leiden, 2013), 67–125.

12 Stevens, *Bede's Scientific Achievement*, 23 n12.
13 For instance, in Bede, *HE* 1.1 (ed. Lapidge, SC 489, 110); Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 49).
14 Isidore, *De natura rerum* praef. (ed. Fontaine, 167): 'secundum quod a ueteribus uiris ac maxime sicut in litteris catholicorum uirorum scripta sunt'.
15 Astrology: *Etymologiae* 3.71.22–41 (ed. Lindsay); soul as wind: *Etymologiae* 11.1.7 (ed. Lindsay).
16 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 9–12.
17 For instance, M.L.W. Laistner, 'The Library of the Venerable Bede', in A.H. Thompson (ed.), *Bede, His Life, Times and Writings* (Oxford, 1935), 237–66, at 256; Jones, *Bedae Venerabilis Opera de Temporibus*, 131–2; P. Meyvaert, 'Bede the Scholar', in G. Bonner, *Famulus Christi: Essays in Commemoration of the Thirteenth Centenary of the Birth of the Venerable Bede* (London, 1976), 40–69, at 58–9; Ray, 'Bede's *Vera Lex Historiae*', *Speculum* 55 (1980), 1–21, at 16–17.
18 McCready, 'Bede and the Isidorian Legacy'; McCready, 'Bede, Isidore and the *Epistola Cuthberti*'; Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 13–20.
19 Herren, 'On the Earliest Irish Acquaintance with Isidore of Seville', in E. James (ed.), *Visigothic Spain: New Approaches* (Oxford, 1980), 243–50; M. Smyth, 'Isidorian Texts in Seventh-Century Ireland', in A. Fear and J. Wood (eds), *Isidore of Seville and His Reception in the Early Middle Ages: Transmitting and Transforming Knowledge* (Amsterdam, 2016), 111–30; Warntjes, *Munich Computus*, xxx–lvi.
20 For the background to this text, and references to further discussion, see E. Graff, 'The Recension of Two Sirmond Texts: *Disputatio Morini* and *De diuisionibus temporum*', in I. Warntjes and D. Ó Cróinín (eds), *Computus and Its Cultural Context in the Latin West, AD 300–1200: Proceedings of the First International Conference on the Science of Computus in Ireland and Europe, Galway, 14–16 July 2006*, Studia traditionis theologiae 5 (Turnhout, 2010), 112–42, at 117–25.
21 On the dating and provenance of *De ordine creaturarum* see M.C. Díaz y Díaz, 'Isidoriana I: Sobre el "liber de ordine creaturarum"', *Sacris Erudiri* 5 (1953), 147–66; M.C. Díaz y Díaz, *Liber de Ordine Creaturarum: Un anónimo irlandés del siglo VII* (Santiago de Compostela, 1972), 20–4; D. Ó Cróinín, 'Bischoff's Wendepunkte Fifty Years on', *Revue Bénédictine* 110 (2000), 216–18; Smyth, 'The Date and Origin of *Liber de Ordine Creaturarum*', *Peritia* 17–18 (2003), 1–39.
22 Pertinent comments are to be found in Stancliffe, 'Creator and Creation', 9–10, 14–15.
23 Bede, *DTR* praef. (ed. Jones, CCSL 123B, 263; trans. Wallis, 3).
24 For instance, Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 10–2).
25 Eckenrode, 'The Growth of a Scientific Mind', 209; Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 140; cf. W.D. McCready, *Miracles and the Venerable Bede* (Toronto, 1994), 27.
26 Jones, *Bedae Venerabilis Opera Didascalica*, 1:xi.
27 Tinelli, *Beda il Venerabile: De Natura Rerum*, 20–1.
28 *Bede, DNR* versus introductorii (ed. Jones, CCSL 123A, 189).
29 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192; trans. Kendall and Wallis, 74).
30 *DOC* 1.1 (ed. Díaz y Díaz, 84): 'Uniuersitatis dispositio bifaria ratione debet intellegi'.
31 Augustine*, DGAL* 6.10 (ed. Zycha, CSEL 28.1, 182).
32 See above, Chapter 1.
33 Bede, *DNR* 2 (ed. Jones, CCSL 123A, 193; trans. Kendall and Wallis, 75): 'non a creaturae gubernatione, cum in ipso uiuamus, et moueamur, et simus, sed a nouae substantiae creatione'.
34 Wallis, 'Bede and Science', 116.

35 Bede, *DNR* 4 (ed. Jones, CCSL 123A, 195–6).
36 Bede, *DNR* 4 (ed. Jones, CCSL 123A, 195): 'imum in creaturis obtinet locum'.
37 *DOC* 4.6 (ed. Díaz y Díaz, 108).
38 Bede, *DNR* 4 (ed. Jones, CCSL 123A, 195).
39 Ambrose, *Exameron* 3.4.18 (ed. Schenkl, CSEL 32, 71–2); Isidore, *De natura rerum* 11.2 (ed. Fontaine, 215).
40 Bede, *DNR* 3 (ed. Jones, CCSL 123A, 194).
41 Bede, *DNR* 7 (ed. Jones, CCSL 123A, 198).
42 Bede, *DNR* 7 (ed. Jones, CCSL 123A, 198): 'caelis quidem spiritalibus humiliores sed tamen omni creatura corporali superiores'.
43 Bede, *DNR* 7 (ed. Jones, CCSL 123A, 198; trans. Kendall and Wallis, 77): 'Hoc deus aquis glacialibus temperauit ne inferiora succenderet elementa'.
44 Bede, *DNR* 8 (ed. Jones, CCSL 123A, 198–9). This competing theory had been put forward by Augustinus Hibernicus, and was known to Bede through a reference in *De ordine creaturarum*.
45 Bede, *DNR* 3 (ed. Jones, CCSL 123A, 194; trans. adapted from Kendall and Wallis, 75).
46 Bede, *DNR* 5 (ed. Jones, CCSL 123A, 196).
47 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 217): 'omnia pura ac diurnae lucis sunt plena'.
48 See above, Z00, and Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 76 n23.
49 Bede, *Hom*. 2.15 (ed. Hurst, CCSL 122, 286).
50 Bede, *In epistulas septem catholicas* 3.2 (ed. Hurst, CCSL 121, 270).
51 In the later middle ages, philosophers would argue that the sphere of earth and the sphere of water had different centres, thus allowing for the top of the earth to poke above the water in the northern hemisphere (see further below, 67–8).
52 Isidore asked this question and provided a number of possible solutions in his *Etymologiae* 13.14.3 (ed. Lindsay).
53 Pliny, *NH* 1.66 (ed. Rackham, LCL 330, 300).
54 Taub, *Ancient Meteorology* (London, 2003), 143–4, 147, 151–2; A.K. Biswas, *History of Hydrology* (Amsterdam, 1970), 96–9; J.O. Thomson, *History of Ancient Geography* (New York, 1965), 104–5; M.N. Baker and R.E. Horton, 'Historical Development of Ideas Regarding the Origin of Springs and Ground-Water', *Eos: Transactions, American Geophysical Union* 17 (1936), 395–400. A vivid visualisation of what this subterranean network of rivers might have looked like to ancient authors can be found in the wonderfully detailed illustrations found in copies of Athanasius Kircher's *Mundus subterraneus* (1665), an example of which can be seen at: <collections.leventhalmap.org/search/commonwealth:n8710p88b>.
55 Pliny, *NH* 66 (ed. Rackham, LCL 330, 300).
56 Bede, *DNR* 5 (ed. Jones, CCSL 123A, 196).
57 Bede, *DNR* 44 (ed. Jones, CCSL 123A, 227; trans. Kendall and Wallis, 97): 'mutuo implexu iungerentur, hac sinus pandente, illa uero permeante totam, intra, extra, supra, infra, uenis ut uinculis discurrentibus, atque etiam in summis iugis erumpente'.
58 The 'veins of the earth' were also responsible for earthquakes. See below 219.
59 Bede, *In canticum Abacuc* 3.10 (ed. Hudson, CCSL 119B, 395; trans. Connolly, 80, modified): 'Quod ita fieri posse non ambigit, qui prudenter intellegit, ita uenis aquarum innumeris tellurem, sicut uenis sanguinis corpus humanum esse plenissimum'.
60 Bede, *DNR* 46 (ed. Jones, CCSL 123A, 228).
61 Bede, *DNR* 46 (ed. Jones, CCSL 123A, 228).
62 Bede, *DNR* 51 (ed. Jones, CCSL 123A, 233–4).

63 Bede, *DNR* 46 (ed. Jones, CCSL 123A, 228–9).
64 Bede, *DNR* 19 (ed. Jones, CCSL 123A, 211).
65 Bede, *DNR* 29 (ed. Jones, CCSL 123A, 219–20).
66 Bede, *DNR* 29 (ed. Jones, CCSL 123A, 219–20).
67 Bede, *DNR* 29 (ed. Jones, CCSL 123A, 219–20).
68 Bede, *DNR* 49 (ed. Jones, CCSL 123A, 232).
69 See 'Earthquakes, Theories from Antiquity to 1600', in G. Good (ed.), *Sciences of the Earth: An Encyclopedia of Events, People, and Phenomena*, Vol. 1 (London, 1998), 197–205; L. Chatelain, 'Théories d'auteurs anciens sur les tremblements de terre', *Mélanges d'archéologie et d'histoire de l'Ecole française de Rome* 29 (1909), 87–10.
70 Pliny, *NH* 2.81 (LCL 330, 322–4).
71 Isidore, *DNR* 46 (ed. Fontaine, 320–21).
72 Bede, *DNR* 49 (ed. Jones, CCSL 123A, 232); cf. Pliny, *NH* 2.83; 2.86 (LCL 330, 326; 330).
73 Bede, *DNR* 11 (ed. Jones, CCSL 123A, 202): '…uideamus igniculos ex aethere lapsos portari uentis … trucibus cito coorientibus uentis'. I read Bede's phrase here differently to Kendall and Wallis, *Bede: On the Nature of Things and On Times*, 80. Note that this phenomenon is distinct from planets or comets.
74 Eckenrode, 'The Growth of a Scientific Mind', 209.
75 Eckenrode, 'The Growth of a Scientific Mind', 209.
76 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 155, 156.
77 Bede, *DNR* 24 (ed. Jones, CCSL 123A, 216): 'regni mutationem aut pestilentiam aut bella, uel uentos aestus ue, portendentes'.
78 Bede, *IG* 2.9 (ed. Jones, CCSL 118A, 135).
79 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192; trans. Kendall and Wallis, 74): 'etiam coruos pascit et lilia uestit'.
80 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 7–20.
81 Tinelli, *Beda il Venerabile: De Natura Rerum*, 24–51.
82 Warntjes, *The Munich Computus*, xlvii–xlviii. Cf. Warntjes's review of Kendall and Wallis's translation of *De natura rerum* in *The Medieval Review* (2012) <https://scholarworks.iu.edu/journals/index.php/tmr/article/view/17613>.
83 Wallis, 'Bede and Science', 116.
84 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 12; Wallis, 'Reframing Bede's "Science"', 73; Fontaine, *Isidore de Séville: Traité de La Nature* (Bordeaux, 1960), 7.
85 See especially J. Picard, 'Bede and Irish Scholarship: Scientific Treatises and Grammars', *Ériu* 54 (2004), 139–47, at 139–44; cf. M. Smyth, '*Liber de Ordine Creaturarum*: A Translation', *The Journal of Medieval Latin* 21 (2011), 146–9.
86 Bede, *DNR* 33 (ed. Jones, CCSL 123A, 221–2; trans. Kendall and Wallis, 93).
87 *DOC* 7.5 (Díaz y Díaz, 130).
88 Bede, *DNR* 33 (ed. Jones, CCSL 123A, 222; trans. Kendall and Wallis, 93): 'Sed pluuias uocamus lentas et iuges, nimbos autem repentinos et praecipites'; cf. Isidore, *Etymologiae* 13.10.3 (ed. Lindsay).
89 Bede, *DNR* 34 (ed. Jones, CCSL 123A, 222; Kendall and Wallis, 93): 'Grandinis lapilli ex stillis pluuiae, frigoris et uenti rigore conglaciati, in aere coagulantur"; cf. *DOC* 7.6 (ed. Díaz y Díáz, 130).
90 Bede, *DNR* 34 (ed. Jones, CCSL 123A, 222; Kendall and Wallis, 93): 'sed citius niue soluuntur, et interdiu saepius quam noctu decidunt'; cf. Pliny, *NH* 2.61 (LCL 330, 288).
91 Stancliffe, 'Creator and Creation', passim.
92 Bede, *DTR* 67–71 (ed. Jones, CCSL 123A, 535–44).

93 *DNR* 2 (CCSL 123A, p. 193; trans. Kendall and Wallis, p. 75): 'septimo Dominus requievit, non a creaturae gubernatione, cum in ipso vivamus, moveamur, et simus, sed a novae substantiae creatione'.
94 Kendall and Wallis, *Bede: On the Nature of Things and on Times*, p. 137.
95 Augustinus Hibernicus, *De mirabilibus sacrae scripturae* 1.1 (PL 35, 2151–2).
96 Augustinus Hibernicus, *De mirabilibus sacrae scripturae* 1.1 (PL 35, 2151–2).
97 On the reception of the *Instituta*, see M.L.W. Laistner, 'Antiochene Exegesis in Western Europe during the Middle Ages', *The Harvard Theological Review* 40 (1947), 19–31; M. Pollheimer, 'Divine Law and Imperial Rule: The Carolingian Reception of Junillus Africanus', in C. Gantner, R. McKitterick and S. Meeder (eds), *The Resources of the Past in Early Medieval Europe* (Cambridge, 2015), 118–34.
98 H. Gneuss and M. Lapidge (eds), *Anglo-Saxon Manuscripts: A Bibliographical Handlist of Manuscripts and Manuscript Fragments Written or Owned in England up to 1100* (Toronto, 2014), no. 368; R. Thomson, 'Identifiable Books from the Pre-Conquest Library of Malmesbury Abbey', *Anglo-Saxon England* 10 (1981), 1–19, at 8–10; Laistner, 'Antiochene Exegesis'.
99 M. Lapidge, *The Anglo-Saxon Library* (Oxford, 2006), 219; Kendall and Wallis, *Bede: On the Nature of Things and on Times*, 75 n13.
100 The influence of Junillus on Bede has been recognized by Alessandra Di Pilla, 'Cosmologia e uso delle fonti nel *De natura rerum* di Beda', *Romanobarbarica* 11 (1991): 129–47, at 131 and 133 n13.
101 Junillus Africanus, *Instituta regularia diuinae legis* 2.2.12 (ed. and trans. Collins).
102 Bede, *DTR* 2 (ed. Jones, CCSL 123A, 275; Wallis, 14).
103 Wallis, *Bede: The Reckoning of Time*, 265; Wallis, 'Reframing Bede's "Science"', 80–2.
104 Bede, *DNR* 35 (ed. Jones, CCSL 123A, 392).
105 Bede, *DNR* 35 (ed. Jones, CCSL 123A, 392; trans. Wallis, 101): 'macilentos, multum tamen comedentes, ueloces, audaces, iracundos, agiles'.
106 Bede, *DTR* 30 (ed. Jones, CCSL 123A, 373).
107 Bede, *DTR* 26 (ed. Jones, CCSL 123A, 360): 'in confinio aeris huius turbulenti et puri decurrit aetheris'.
108 Bede, *DTR* 26 (ed. Jones, CCSL 123A, 361–2).
109 Eckenrode, 'The Venerable Bede's Theory of Ocean Tides'; Stevens, *Bede's Scientific Achievement*, 11–18.
110 Bede, *DTR* 28 (ed. Jones, CCSL 123A, 364). Similar information could be found in Pliny, *NH* 2.102 (ed. Rackham, LCL 330, 349).
111 Ambrose, *Hex*. 4.7.29 (ed. Schenkl, CSEL 32.1, 134).
112 Bede, *DTR* 28 (ed. Jones, CCSL 123A, 364–5); Vegetius, *Epitoma rei militaris* 4.35 (ed. Önnerfors, 238). For Bede's use of Vegetius, see C.W. Jones, 'Bede and Vegetius', *The Classical Review* 46 (1932), 248–9.
113 Bede, *DTR* 28 (ed. Jones, CCSL 123A, 365–6); Eustathius, *In hexaemeron Basilii* 1.11.1 (ed. Amand de Mendieta and Rudberg, 16–18).
114 Bede, *DTR* 29 (ed. Jones, CCSL 123A, 366).
115 I have not found any extended commentary on this notion, but see Cicero, *De diuinatione* 2.14.33–4 (LCL 154, 406); Sambursky, *Physics of the Stoics*, 41–2; S. White, 'Posidonius and Stoic Physics', in R. Sorabji and R.W. Sharples (eds), *Greek and Roman Philosophy 100 BC–200 AD*, Vol. 1, 35–76, at 67–76; Roller, 'Seleukos of Seleukeia', *L'Antiquité Classique* 74 (2005), 111–18, at 115–17; I. McDougall, 'The Third Instrument of Medicine: Some Accounts of Surgery in Medieval Iceland', in S. Campbell, B. Hall and D. Klausner (eds), *Health, Disease and Healing in Medieval Culture* (Toronto, 1992), 57–83, at 70;

T.R. Eckenrode, 'The Romans and Their Views on the Tides', *Rivista di cultura classica e medioevale* 17 (1975), 269–92, at 273–6, 291–2.

116 Pliny, *NH* 2.102 (ed. Rackham, LCL 330, 349); Isidore, *De natura rerum* 19 (ed. Fontaine, 248); Augustine, *DCD* 5.6 (ed. Dombart and Kalb, CCSL 47, 134).

117 Bede, *DTR* 7 (ed. Jones, CCSL 123A, 297; trans. Wallis, 29, modified).

118 Wallis, *Bede: The Reckoning of Time*, 277.

119 Brown, 'Christianization and Religious Conflict', 636.

3 Bede's cosmogony

Creation, perfection, decline

In this chapter I turn to the subject of Bede's cosmogony—his understanding of the universe's beginning. This subject has not received a huge amount of attention in comparison with other areas of his thought—certainly not as much as his understanding of the universe's end—but it was of central importance to the way in which he understood the natural world to function.[1] The prevalent Christian understanding of the beginnings of the universe was founded on information drawn from the Bible and developed into an elaborate paradigm by early Church theologians.[2] Whereas ideas about the topography of the universe were almost wholly reliant, as have seen, on classical tradition, the sophisticated model of cosmic origins devised by Christian thinkers was an ingenious elaboration on the basic ideas found in Scripture. The beginning of the cosmos was explained with recourse to a number of different scriptural passages, most importantly the creation narrative of the Book of Genesis (assumed in this era to have been composed by Moses), read in light of assumptions derived from Graeco-Roman intellectual traditions.

Bede's most detailed discussion of the beginning of the world is to be found in his commentary on the Book of Genesis. This work had a complicated life. Bede first completed a short commentary in two books, covering the first three chapters of Genesis, for which Calvin Kendall has posited a composition date of *c.*717–18.[3] Later, perhaps between 722 and 725, Bede consolidated these two books into one and completed a further three: these four new books represent the version of *In Genesim* that has come down to us.[4] Book 1 of this finalized work—which contains Bede's discussion of the creation of the world and the Fall of humankind—will be the central focus of this chapter's discussion. Also of some relevance is a hymn on the six days of creation and the six Ages of the world—*Hymnus de opere sex dierum primordialium et de sex aetatibus mundi*—composed by Bede at some unknown point in his career, though probably before 731.[5] Additionally, Bede touched upon the subject of cosmogenesis in both *De natura rerum* and *De temporum ratione*, and there are some relevant comments to be found in his other exegetical works and in his homilies. I will make reference to this material when appropriate.

Modern scholarship has tended to focus on the extent to which Bede's cosmogonical understanding is reliant on patristic thought, particularly the creation theology of Augustine. Charles W. Jones saw the first book of *In Genesim* as Bede's juvenilia, unadventurous and imitative: 'a young teacher's didactic presentation of patristic accounts of creation, simplifying and modifying without distorting Augustine's cosmology'.[6] Joseph Kelly has remarked that Bede showed independence from Augustine in Book 1, but only 'on points of physical creation'.[7] On the other hand, Kendall has written that Bede showed 'independence of mind' and a 'freedom from the mindset of the late Antique period',[8] and Conor O'Brien has recently argued that Bede's discussion of the six days of creation in *In Genesim* departed in some important respects from the Augustinian interpretation, even if he refrained from explicitly criticizing Augustine by name.[9]

The broad outline of Bede's cosmogony is certainly in line with established Christian tradition: the Book of Genesis provided the basic structure; patristic hexaemera filled out the details. In the preface to *In Genesim*, Bede helpfully listed his chief exegetical sources: Basil's *Hexaemeron* (in the Latin translation of Eustathius), Ambrose's *Hexaemeron* and Augustine's *De Genesi ad litteram* and *De Genesi contra Manichaeos*. These four works represent a genre of hexaemeral literature that was of huge interest to late antique and medieval Christian thinkers, not least because it afforded them a chance to talk about natural philosophical issues.[10] Indeed, Bede explained that, because these hexaemera were so numerous—and therefore expensive to obtain—his objective in writing was to provide an accessible précis of their main points for the inexperienced reader.[11] Bede's preface is rather misleading, however, in that it implies that his commentary comprises a simple digest of patristic opinion. In fact, as we shall see, Bede often elaborated significantly on patristic discourse in *In Genesim*, particularly, as Joseph Kelly observed, in the realm of cosmology. As I shall show in this chapter, Bede assembled his own unique cosmogony by drawing on numerous sources: not only patristic hexaemeral literature but also post-patristic tradition, other books of the Bible and even his own observations of the natural world.

God's creative power and the 'moment' of creation

In the first chapter of *De natura rerum*, Bede provided the reader with a short description of the four different aspects of 'the operation of divine power' (*operatio diuina*).[12] To the modern reader, this may seem a curious and abstruse starting point for a work dedicated to cosmography and physics. In Bede's view, however, an understanding of the physical cosmos was inseparably tied to an understanding of how that cosmos came to be. This opening chapter was in fact central to his purposes in composing *De natura rerum*. It represented his response to a long tradition of cosmogonical interpretation and elaboration, stretching back to the earliest Christian centuries, which centred on the manner and timing of creation. The impetus for

this tradition had been a desire to reconcile the narrative of Genesis 1:1–2:3 with the preconceptions of Graeco-Roman philosophical discourse.[13] The ideas that emerged from this intersection of Scripture and classical philosophy shaped patristic and medieval debates about creation and about the power of God, and it is against this complex theological background that we should read Bede's statement. It is therefore worth taking some time to briefly explain the intellectual context for Bede's fourfold *operatio diuina*.

Though it would later become a tenet of Christian belief, the idea of *creatio ex nihilo* ('creation from nothing') was not originally present in Scripture. On the contrary, Genesis 1:2 seemed to imply the pre-existence of a 'void' that was *shaped* by God rather than the creation of the world from nothing. Neither was Graeco-Roman philosophy in general receptive to the idea that there had been a moment of creation *ex nihilo*, though many schools of thought accepted the idea of a creator who shaped pre-existing matter.[14] From the second century on, however, the notion of *creatio ex nihilo* became part of the Christian mainstream and was defended by authorities such as Irenaeus, Tertullian and Theophilus of Antioch.[15] The opening line of Genesis ('In the beginning God created heaven, and earth') could be read in this light as an assertion of God's simultaneous creation of everything from nothing. 'What a good arrangement', wrote Ambrose in the fourth century, 'that [Moses] should first assert what these men are accustomed to deny, that they may realize, too, that there was a beginning to the world, lest men be of the opinion that the world was without a beginning'.[16]

Still, some parts of Scripture, such as Wisdom 11:17, implied that God had created the world *from* formless matter. As Paul Blowers has recently detailed, in order to integrate both *creatio ex nihilo* and the idea that the primitive universe had been composed of formless matter, many of the most important Christian theologians of late antiquity advocated an interpretation of Genesis that incorporated a 'dual creation': according to this model, God *first* created the basic substance of the universe *ex nihilo* and *then* shaped this formless substance into the comprehensible world.[17] The creation narrative of Genesis was therefore read in such a way as to imply a first 'potential' or 'seminal' creation (encapsulated in the opening line, 'in the beginning, God created heaven and earth'), which was then actualized (as depicted in the rest of the narrative of creation). As Ambrose phrased it, things were 'made first, and afterwards put in order'.[18]

But although most patristic theologians agreed that the opening line of Genesis implied a creation *ex nihilo*, they did not concur on what to make of the narrative that followed, in which God was depicted creating specific elements of the cosmos, in turn, over the course of six days. Many late ancient commentators, influenced by the assumptions of Hellenic cosmology, were disinclined to take literally the idea of God's creation having taken place over six days. Why would it have taken God, who is omnipotent, any period of time at all to work his act of creation? The first-century Jewish philosopher Philo set the tone when he dismissed as ridiculous the idea that

God created the world over the course of a literal six-day period, 'or in a space of time at all'.[19] Some early Christians took the six-day creation narrative metaphorically, others argued sharply against straying from a literal reading of the text.[20] The compromise that emerged was the view that the initial creation had been instantaneous, but that the subsequent shaping of the primordial matter took place over the course of six literal days. The idea of a 'dual creation' again allowed exegetes to have it both ways. Notably however, Augustine broke ranks with his contemporaries on this issue, preferring to interpret the six days allegorically.[21]

Hexaemerists also had to contend with complex ideas about the *logos*. The *logos*, for the Stoics, had been a divine spirit of providential reason that pervaded the world, sustaining and governing it.[22] For some ancient Jewish writers—and thereafter for Christian theologians—the *logos* served as a means by which to understand the sustaining power of God in the world.[23] The idea that the *logos* represented a mediator between Creator and creation thus began to enter biblical exegesis from at least the time of Philo.[24] In the New Testament, John identified Christ with the *logos*: 'in the beginning was the Word (*logos*) and the Word was with God' (John 1:1). Read in conjunction with Genesis 1:1 and with Psalm 33:6 ('by the word of the Lord the heavens were established'), this provided Christians with a complex mystical understanding of Christ's role in creating and sustaining the cosmos. All of creation is contained by the Christ-*logos*, who is 'the beginning of all things and the end' (*initium omnium et finis*),[25] the Alpha and the Omega (Rev 22:13).[26] The fact of Christ's eternal pre-existence added another wrinkle to the already involved Christian reading of creation. In order to accommodate this understanding, a further step was added to the ontological chronology of creation. As Augustine explained, everything that is always 'existed' *in potentia* in the *logos*; the actualization of this potential happened when God created the world.[27]

Finally, Christians also needed to reconcile two seemingly contradictory aspects of God's creation. The Genesis narrative presented creation as one particular occurrence in time (whether or not the six days were taken literally) and implied that God had ceased to create anything new after this initial moment (Gen 2:1–3). Yet Christ's statement in the Gospel of John ('my father is working until now': John 5:17) seemed to imply that God was still directing the workings of nature. Furthermore, new things continued to appear in the world—were these not signs of a continuing creation? Hellenic philosophical traditions once again offered a key. Stoic and Neoplatonic writers had long drawn an analogy with biological seeds (which contained within themselves the potential for future growth and creation) in order to explain the often-seemingly random permutations of nature: these *logoi spermatikoi* ('seminal reasons') were, as Marcia Colish puts it, 'planted by the divine *logos* with a delayed reaction or time bomb effect, triggered to go off at some later date according to a divinely ordained schedule'.[28] Christian writers adopted this concept in order to smooth out

the perceived inconsistencies in the scriptural depiction of God's creative power. Theologians, most famously Augustine, began to speak of the 'seminal reasons'—seeds that had been *created* by God during the initial six-day creation but which continued to develop and unfold since then according to their internal blueprints.[29] The created world was now, in the words of one Augustinian scholar, 'a world in motion, a set of processes in which potential is realized'.[30] This view moved the focus away from a 'moment' of creation and onto the idea of a 'potential' creation that continued to develop after the initial inception of the cosmos. It is worth noting at this juncture that, although Augustine's discussions of the seminal reasons have been particularly celebrated by modern theologians, similar ideas pre-existed Augustine's writings and continued to develop both independently and in conjunction with Augustinian terminology. A wide variety of writers from Maximus the Confessor to Isidore articulated their own version of the idea that God embedded dormant creative principles within his first creation and to Bede it likely would not have seemed a particularly Augustinian theme.[31]

By Bede's day, therefore, the theology of creation was a complex and tangled tradition, in which the opinions of numerous orthodox writers clamoured to be heard. Bede's careful enumeration of the four different mechanisms by which God's created power was realized represents a sophisticated synthesis of previous opinions on the nature of creation, honed by Bede into a short, sharp statement of doctrine. He found the basic framework for his discussion in a line from Augustine's *De Genesi ad litteram*, in which the Bishop of Hippo had noted the four different senses in which he understood the world to have arisen (in the word of God; in the simultaneous creation of the elements *ex nihilo*; in the creation of the material world from those elements, which for Augustine was also simultaneous; and in the 'seminal reasons' which continued to operate even after this initial moment of creation).[32] Bede fleshed out Augustine's short and rather dry and difficult explanation, interleaving quotations from apposite passages of Scripture and refining the language. Most importantly, he rejected Augustine's allegorical reading of the six days of creation, preferring instead the literal reading of Ambrose and Basil. Here is Bede's version (the parallels with Augustine are underlined):

> *Operatio diuina, quae secula creauit et gubernat, quadriformi ratione distinguitur: primo, quod haec in uerbi dei dispensatione <u>non facta, sed aeterna sunt</u>, qui nos, apostolo teste, ante tempora secularia praedestinauit in regnum. Secundo, quod in materia informi pariter elementa mundi facta sint, ubi qui uiuit in aeternum creauit <u>omnia simul</u>. Tertio, quod eadem materies, <u>secundum causas simul creatas non iam simul</u>, sed distinctione sex primorum dierum in caelestem terrestremque creaturam, formatur. Quarto, quod eiusdem creaturae <u>seminibus</u> et <u>primordialibus causis</u> totius seculi tempus naturali cursu peragitur, ubi pater usque nunc operatur et filius, ubi etiam coruos pascit et lilia uestit deus.*

> The operation of divine power, which created and governs the universe, is divided in four ways: first, that all these things were not made but are eternal in the dispensation of the Word of God, who, as the Apostle testifies, "predestined us" (Eph 1:5) for his kingdom "before the times of the world" (2 Tim 1:9; Titus 1:2); second, that the elements of the world were made all at the same time in unformed matter, when he who lives eternally created everything at once; third, that the same matter is formed into a heavenly and an earthly creation, partly from existing causes, and partly from causes not yet existing, but each thing coming into existence by the distinct workings of the first six days; fourth, that the temporal constitution of the whole world is brought about in the natural course of things by the seeds and primordial causes of this same creation, wherein the Father and the Son work right up to the present, and God even "feeds the ravens" (Luke 12:24) and "clothes the lilies" (Luke 12:27).[33]

This passage demonstrates Bede's mastery of complex theological issues; he managed to accommodate most of the important aspects of the previous seven centuries of Christian thought on this issue. Though he used the passage from *De Genesi ad litteram* as a framework, he was not overly indebted to Augustine's cosmogony. As was often the case, he managed to find a middle ground between differing interpretations, one that served to weave together the opinions of his preferred Church Fathers. Augustine's allegorical reading of the six days was rejected, but his terminology of seeds and primordial causes was retained.

Returning to the subject of creation in *In Genesim*, Bede again discussed the different stages of creation and was again careful to distinguish between them. He did not, this time around, spend much time on the subject of the 'first' creation in the eternal *logos*, except to clarify for his readers that, when Scripture spoke of God 'speaking' (as in 'And God said, Let there be light'), 'we must not believe that he did it in our fashion by the corporeal sound of the voice'.[34] Rather, such phrases were a reference to the fact that God made everything 'through his Word' (*per uerbum suum*), that is, through Christ, his 'only-begotten son' (*unigenitus filius*). As he went on to explain, this is the meaning of such scriptural passages as John 1:1–3 ('In the beginning was the Word, and the Word was with God, and the Word was God; the same was in the beginning with God; all things were made by him') and Psalm 32:6 ('By the word of the Lord the heavens were established and all the power of them by the spirit of his mouth') though in the latter of these, he noted, the Holy Spirit is also implied to have played a role.[35] He concluded by reiterating the doctrine that all of creation existed eternally in the *logos* before it came into existence in time: 'we are to understand that it was through the Word of God that it was done, through whom God foresaw inwardly before all time that whatever he did outwardly in time was to be done'.[36]

In the same work, Bede made very clear the difference between, on the one hand, the simultaneous creation of the unformed *mundus* and, on the other, the shaping of that unformed matter into the material universe over the course of six literal days.[37] He explained that God, who 'had no need of a delay of time' (*non eguit mora temporum*), caused the universe to come into existence immediately and at once: 'the creation of each part was completed simultaneously' (*utrumque simul ab eo factum est*).[38] This simultaneous creation Bede contrasted unfavourably with human capacities. Humans, when building, say, a house, must progress slowly over the course of a period of time. God, on the other hand, created the cosmos 'with such great swiftness of divine power that the first moment of the infant world had not yet passed' (*tanta uelocitate diuinae uirtutis ut necdum primum mundi nascentis momentum esset transcensum*).[39] Once this was done, the entirety of material creation existed in a formless state—all of the material elements were already in existence in the raw admixture of the world that God had created *ex nihilo* but they still needed to be teased out and shaped by him. In other words, the unformed matter which had been created 'simultaneously' (*simul*) contained within itself all those things which were soon to be brought out 'individually' (*non simul*) by the Creator. Bede compared this first creation therefore to a kind of 'seminal substance' (*substantia seminalis*) in which all material creatures lay concealed.[40] In this sense, then, no new components (with one exception) were introduced to the world after the initial simultaneous creation—during the six days God was not technically 'creating' any new material but was simply shaping the matter that he had already created. The only truly new component added to creation over the course of the six days was the human soul, which God created 'from nothing' (*de nihilo*) on the sixth day.[41]

Finally, *In Genesim* also contains some discussion of God's continuing creative activity in the world. Although God ceased from creating anything new after the six days of creation, He was still at work in the world: 'from then until now he works at the governance of those same species which were instituted at that time'.[42] Bede did not, in *In Genesim*, make much use of Augustine's terminology of 'seeds' and 'seminal reasons'. To some scholars, it has appeared that Bede, having drawn on the theory of the *rationes seminales* in his earlier works, had come to reject or downplay this model of creation by the time he came to write *In Genesim*.[43] This is, I would argue, to mischaracterize Bede's earlier use of the theory. The notion of the 'seminal reasons' did not have the same weight for Bede that it had had for Augustine; for him, the important elements of this doctrine could be expressed in other ways. When he stated that God 'attends to the operation' (*operatur administrationem*) of all the things that had been 'instituted' (*instituta*) at the moment of creation, he was saying more or less what he had stated before, when he spoke of the seeds and primordial causes: that God continued to govern and guide creation but that he did not create anything new after the sixth day.[44]

The mechanics of the six-day creation

With these distinctions between the different aspects of creation in mind, let us turn to Bede's discussion of how the six-day creation actually proceeded. To the patristic exegetes, the narrative of Moses had not seemed at all incompatible with classical scientific principles. In fact, they believed that it had been written with them in mind. Moses, declared Augustine, 'was not ignorant of the nature and order of the elements when he described the creation of visible things that move by nature throughout the universe in the midst of the elements'.[45] The basic assumptions of classical tradition—particularly elemental theory and the spherical, geocentric universe—were thus read into the biblical account of creation. Bede was no different in this regard: in *In Genesim*, he elaborated on the terse and often cryptic statements found in Genesis by drawing on the classically influenced cosmology that he had developed in *De natura rerum*. What is particularly interesting is the extent to which Bede's assumptions about physics allowed him to read a particular logic into the order in which things were created: 'the world', said Bede, 'proceeded in perfectly proper order from unformed matter to harmonious form'.[46] He thus divided the six-day creation into two distinct phases: first came the creation and differentiation of the four elements and corresponding areas of the *mundus* (the earth, the waters, the *aer* and the *aether*; days one to three), then the 'adornment' of these four areas, in turn (days four to six).

Throughout his discussion of the mechanics of the six-day creation, Bede echoed patristic tradition in his habit of drawing analogies between particular aspects of the creation narrative and the ways in which nature was understood to operate in the present. Basil, Ambrose, Augustine and many others had made copious use of examples and precedents drawn from nature (or rather from contemporary natural philosophy). This recourse to commonly accepted knowledge about the natural world was used to justify belief in a particular element of Christian ideology that was felt to be difficult to accept, such as the existence of hell, the resurrection of the body or the historicity of the miracles depicted in Scripture. It was particularly common in hexaemeral literature, where exegetes drew on knowledge of the natural world (gained either through first-hand experience or, more commonly, from the writings of natural philosophers) to argue for the likelihood or reasonableness of certain key Christian tenets.

The first day

'In the beginning', according to Scripture, 'God created heaven and earth' (Gen 1:1). But what was this 'heaven and earth' that arrived with the first simultaneous creation? As we have seen, 'heaven' (*caelum*) was an ambiguous term and a scriptural reference to a *caelum* could imply a number of different things. For Bede, the *caelum* referred to in the first line of Genesis

could only be the spiritual heaven, the *caelum superius*. After all, the fact that Moses, in the following line of Scripture, saw fit to specify that the earth was empty and the abyss dark (Gen 1:2) surely implied that this was *not* true for the 'heaven' of Genesis 1:1.[47] That 'heaven' must therefore be the *caelum superius*, which from the very moment of its creation was resplendently bright and full of the choirs of angels.[48] In his *De temporum ratione*, Bede explained the same concept in different words: although 'some of the fathers' (*quidam patrum*) read the 'heaven and earth' of Genesis 1:1 as an undifferentiated primeval mass, it was better to follow other 'equally catholic fathers' (*patres aeque catholici*), who argued that *caelum* designated 'the circle of the upper heaven' (*circulus caeli superioris*) and *terra* 'the Earth itself, enclosed in the confines which belong to it now' (*tellus ipsa suis quibus et nunc est finium spatiis inclusa*).[49] The first simultaneous creation therefore had brought into existence two things: the *caelum superius* and the *mundus*. And although Genesis 1:1 might be taken to imply that heaven was created first, followed by earth, this was not, in Bede's view, the correct reading. Instead, it should be understood that both were created simultaneously, 'even though it could not be said simultaneously in human language'.[50]

What, at this early stage, did the *mundus* consist of? Although Scripture does not explicitly say that God created the waters in this fist moment, 'it nevertheless signifies it openly when it makes known that they were illuminated by God and set in order at his command'.[51] When Scripture referred to 'earth' and 'water'/'abyss', Bede, like the Church Fathers, understood that the elements of earth and water were meant. These elements, he claimed, 'are expressly mentioned as having been made in the beginning with heaven'.[52] The *mundus* that came into being at the original moment of creation, therefore, was a two-part universe: divided neatly between earth and water. Rather than intermingling together as they now did these two elements were at this stage sharply divided: the sphere of earth sat in the centre of the cosmos and the sphere of water above and around it. They were not 'as some argue' (*ut quidam disputant*) mixed together formlessly at this stage of the creation narrative. There were thus no continents or islands at this stage—no dry land at all—as the earth was entirely covered by water. But what of the two other elements, fire and air? It was well known, wrote Bede, that fire and air were *also* present at this early stage, mixed up with earth and water in the same way that they still are in part today: fire was present 'in the iron and stones which lay hidden, already buried even then in the bowels of the earth' (*in ferro et lapidibus quae terrae uiscere iam tum condita latebant*) and air lay hidden in the earth itself.[53] According to Bede (who was following a line of argument originally formulated by Basil), one could still see similar processes at work today: the earth was said to often exhale 'vapours' (*uapores*), and the existence of hot springs was proof that there was fire to be found in the subterranean recesses of the earth.[54] It was clear to Bede, then, that all four elements had been present in the original primeval *mundus*, an opinion that was no doubt coloured by his feeling that

God had created no new thing after the first, simultaneous creation but had simply shaped what was already in existence.

Thus, the universe created at that initial moment was a simple three-part layered cosmos: God, 'before any day of this age' (*ante omnem huius seculi diem*), created 'heaven, earth, and water' (*caelum, terra et aqua*)—at the centre lay the mass of the earth; surrounding that and reaching up as far as where the firmament would later stand was the water; finally, outside of that lay the spiritual heaven. Or, to put it another way, the created universe consisted of two parts: 'that higher and spiritual world with its inhabitants' (*superior ille et spiritalis cum suis incolis mundus*), on the one hand, and 'the unformed matter of all this world' (*informis totius huius mundi materia*), on the other.[55] This, then, was how things stood at the beginning of the first day.

God's first act of shaping this primordial *mundus* came with the creation of light: 'God said "Let there be light", and light was made' (Gen 1:3). For Bede, there was an important distinction to be made between the light experienced in the *mundus* and the 'true' light of heaven. Conceptions of light and its qualities varied in late antiquity.[56] For Neoplatonist philosophers—and for many Christians—light represented the aspect of the material world that was purest and closest to the world of forms—and to divinity. Divine light was, in the words of one modern scholar, 'an intellectual and immaterial light of which sensible light was a lowly derivative'.[57] For Augustine, intellectual enlightenment—in other words, knowledge—was explained by analogy with the physical phenomenon of light. In the same way that physical light allowed the human eye to see, divine light allowed the human mind to apprehend a reified and divine 'knowledge' (that is, God). This was no figure of speech. According to Augustine: 'Christ himself is not called the Light in the same way as he is called a stone: he is literally the Light but [only] metaphorically a stone'.[58] It was clear to Bede, therefore, that when Genesis stated that God created 'light' after having created the spiritual and physical universe, this could not refer to spiritual, 'true' light, which had always existed and which was analogous to the divine. It must instead designate the corporeal light of the material plane.[59] The fact that the *mundus* experienced only this fleeting form of light was, indeed, an important distinction between it and the *caelum superius*: 'it is for the higher world', said Bede, 'to enjoy to the full fixed and perpetual light'.[60]

After this, God 'divided the light from the darkness, and he called the light day and the darkness night' (Gen 1:4–5). This was an important passage for Bede, as it suggested to him that, even before the creation of the sun, corporeal light was gathered together in one place. Augustine had long ago pointed out an inconsistency in the Genesis account: how could there be a 'day' before the sun had been created?[61] But, for Bede, there was no incongruity: the primeval light created by God on the first day simply fulfilled most of the same functions as the light of sun: 'it is very clear', he said, 'that that first light shone forth then in the upper parts of the same earth, which

the daily light of the sun even now customarily illuminates'.[62] This light, as he explained in *De temporum ratione*, 'differed from solar light only in that it lacked heat, and because the stars did not yet exist, it left those nights still blackened by the primal darkness'.[63] According to Bede, the darkness was placed in the lower part of the globe (i.e. the uninhabited underside of the globe of the earth) and light in the upper part (i.e. in the *oikoumene*). When, as Genesis went on to state, 'there was evening and morning, one day' (Gen 1:5), Bede understood this to imply that this vague conglomeration of light had completed a circuit around the globe, behaving just as the sun later would, completing the first day, 'without doubt a day of twenty-four hours'.[64]

There was one problem with this vision of light shining forth in the primeval *mundus*, however: the space where the sun would later be placed was at this stage engulfed by the waters of the abyss—how could light be present there of all places? Bede, drawing on an argument previously advanced by Basil and Ambrose, explained how this was not a problem.[65] Sailors, it was well known, were able to use oil to make the sea more limpid. It would therefore be quite easy for God to make the primeval abyss capable of carrying light further than it would usually travel in water. In drawing on examples from nature in this way, patristic hexaemerists had been able to explain the mechanics of some of the events described in Scripture and to downplay the idea that such things were impossible or unnatural. By demonstrating the naturalness of God's creation, therefore, Bede was not attempting to 'explain away' the marvellous deeds of the creator but to show how his deeds were completely in keeping with the world that humans could observe around themselves.[66]

The second day

On the second day,

> God said: Let there be a firmament made amidst the waters: and let it divide the waters from the waters. And God made a firmament, and divided the waters that were under the firmament, from those that were above the firmament, and it was so. And God called the firmament, Heaven; and the evening and morning were the second day.
>
> (Gen 1:6–8)

This passage set Bede on a speculative digression, in which he attempted to provide an answer to the long-running question of what was meant by the 'waters above the firmament'. The firmament, as we have seen, was understood as a solid sphere in which were fixed the stars. Bede, like Basil, thought that the firmament might itself be composed of a kind of solidified water, thus explaining in one blow both the nature of the firmament and the means by which the 'waters above the firmament' were held in place.[67] In order to argue that such a thing might be possible, he appealed to both nature

and Scripture. From the former (by way of Basil) he drew the example of 'crystalline rock' (*crystallinus lapis*), a hard substance which, according to late antique natural philosophy, was formed from congealed waters.[68] The existence of such a substance proved that water could be formed into hard structures. He also noted that clouds were essentially water kept aloft in the sky—if God could arrange this phenomenon, surely he could also arrange for an aquatic firmament to be sustained high above the world, 'not with vaporous thinness but with ice-like solidity'.[69] Finally, he made reference to those instances, recorded in Scripture, in which God had lifted and made fixed the waters of the Red Sea and the River Jordan (Ex 14:21–2; Josh 3:14–17)—evidence, said Bede, that agglomerations of water 'can remain in a fixed position'.[70] In reference to this series of examples, Calvin Kendall has voiced his admiration for Bede's 'freedom from the mindset of the late Antique period', due to the fact that he 'took seriously the responsibility of looking for rational or "scientific" explanations of natural phenomena'.[71] In actuality, Bede's habit of referring to the natural world to explain aspects of God's creation does not represent a significant break with late antique thought. As I have already noted, Basil, Ambrose, Augustine and Gregory routinely appealed to natural lore in order to demonstrate how things such as the virgin birth, the everlasting fires of hell or the revivification of the dead were not 'contrary to nature'. The fact that Bede could appeal to both natural lore and scriptural miracle in the same argument should put paid to the idea that he saw any kind of firm division between these thought categories. For Bede, there was no distinction between 'natural' and 'supernatural' causation (as I will discuss below, Chapter 6). This view allowed him great freedom to draw analogies between phenomena observable in the natural world and those works of God described in Scripture.

It is clear from his comments elsewhere in *In Genesim* that Bede understood that the work of the second day also included the creation of the 'firmament' in the sense of the area immediately under the firmament of the fixed stars—in other words, the *aether*.[72] When God 'divided the waters that were under the firmament from those that were above the firmament' he was creating in the process a new region of the *mundus*—a realm of fire between the waters of the abyss and the waters of the fixed firmament. By the end of the second day, then, the *mundus* comprised three distinct areas (discounting the firmament of the stars): the *aether*, the abyss and the earth. Air, the final element, still lay dormant.

The third day

From the moment of the first, simultaneous creation, earth and water had been divided into two separate and distinct realms: at the centre lay the sphere of the earth, and outside of it the concentric sphere of the water. Yet, in the contemporary universe, as outlined in *De natura rerum*, water and earth were intermixed; Bede, as we have seen, had described them as being

'united in a mutual embrace' (*mutuo inplexu iungerentur*).[73] The move from the former to the latter state occurred on the third day, with God's declaration: 'Let the waters that are under the heaven be gathered together into one place: and let the dry land appear' (Gen 1:9).

In *De natura rerum*, Bede had made use of an image—derived from Pliny—of an earth veined with passages and tunnels through which the waters of the world flowed. This Plinian model also underlay his interpretation of the mechanics of the third day of creation. Using it, he was able to explain exactly how the waters were gathered together in one place and how the dry land was made to 'appear'. God, said Bede, essentially caused the earth to churn and form pockets and caverns within itself: 'subsiding far and wide at the command of the Creator, the earth provided other hollow parts, where the waters flowing together were received'.[74] This allowed for some parts of the earth to rise up above water level, so that, as Bede put it, 'the dry land appeared out of those parts from which moisture withdrew'.[75] Bede also thought it likely that the waters of the first creation had been of a particularly attenuated nature—more like clouds or mist than regular water (he had made this argument already when he argued that the primal light could quite easily shine in the abyss). On the third day, then, God could have drawn all of this vaporous water together, thickening and concentrating it, to form for the first time liquid water and allowing it to gather in the Ocean, the rivers and the lakes. Why though, if there were many bodies of water in the world, did Scripture say that God caused the waters to be gathered together in *one* place? The Plinian notion of a porous earth, veined with waterways, again provided the answer. Bede summarized the evidence: even though there appeared to be many different seas, they were all in fact joined together by 'an unbroken and continuous stream of water' (*iugis unda atque continua*); although there were lakes that appeared to be self-contained, they were known to be connected by 'certain hidden caverns' (*occultae quaedam cauernae*) that also eventually lead to the sea; and, finally, 'diggers of wells also prove by experience that the whole earth is filled with waters flowing through unseen veins which take their source from the sea'.[76]

It is worth noting that Bede was entirely unconcerned with some of the issues that dogged cosmological speculation in the later middle ages (and that appear prominently in modern surveys of 'medieval cosmology'), the reason being that his understanding of causation and the role of God in nature was entirely different to the kinds of models suggested by Scholasticism. By the twelfth century, physical mechanics had been divided into those phenomena with 'natural' and those with 'supernatural' causes.[77] The operation of nature, according to this view, had been set in motion by God at the beginning of time, but he did not, it was claimed, routinely interfere with the 'laws of nature'. For this reason, late medieval cosmographers had difficulty explaining why the sphere of water did not simply envelop the sphere of earth.[78] Bede's explanation—that God simply pulled apart the two elements and formed a kind of lattice of land and ocean—could not work in

such a worldview. After all, water and earth should automatically return to their natural places in the cosmos unless there was some other force keeping them from doing so. For Bede, that force was God. For the Scholastics, such an explanation could not work, because such direct and prolonged divine action was no longer thought to accord with the way in which God worked. They therefore pursued other possibilities. One popular theory held that the spheres of water and earth had different centres, allowing one (the sphere of earth) to pop above the waterline in the form of the dry land. In other words, then, Bede's seemingly simple explanation of how the spheres of earth and water came to be intermingled stands as a microcosm of his views of nature and causation more generally and serves as a key example of how that view differed from later centuries of thought. I will return to this theme in Chapter 6.

Bede also saw the third day as the moment when the element of air was separated from the earth, in which it had remained latent, and took up its accustomed position in the space above the earth and below the *aether*. The water, which had covered 'everything between heaven and earth' (*inter caelum et terram uniuersa*), now receded, and as it did so God 'diffused air into its place' (*aerem suis in locis diffudit*)[79] in order that 'the light, which illumined the waters brightly in the two previous days, would shine more brightly in the pure air'.[80]

The work of the third day was not yet complete, however. Having assigned the four elements to their proper places, God turned to the newly exposed land and ordained, 'Let the earth bring forth the green herb, and such as may seed, and the fruit tree yielding fruit after its kind, which may have seed in itself upon the earth'. For Bede, as for Basil and Ambrose, this passage demonstrated that the creation of the earth happened in the spring, 'for that is the time when green plants usually appear on earth and trees are usually loaded with fruits'.[81] Where Augustine had interpreted this first creation of plant-life as a potential, seeded creation that proceeded to grow over time, Bede understood that the earth immediately appeared full of greenery. 'With one command from the Creator' (*ad unam conditoris iussionem*) the earth was 'suddenly adorned' (*repente compta*) with greenery.[82] Or, as he put it a little later:

> *antequam aliqui fructus ex terra crescendo orirentur aut germinarent, repente campi montes et colles herbis erant et arboribus cooperti habentibus congruam altitudinem staturae, diffusionem ramorum, opacitatem filiorum, copiam fructuum, quam non paulatim ex terra oriendo uel germinando et accessu incrementorum proficiendo sed subito ex illa existendo acceperunt.*
>
> before any plants came into being and grew from the earth or put out shoots, the fields, mountains, and hills were suddenly covered with green plants and trees having their appropriate height, multitude of branches,

shadiness of leaves, and abundance of fruits, which they received not little by little from the earth by springing forth or by germinating and springing up with an accession of growths, but by suddenly coming into being from it.[83]

The fourth day

By the beginning of the fourth day, the four realms had been locked into their final arrangement: the *aether* on the second day; the water, the earth and the *aer* on the third day. On the fourth day began the second phase: the 'adornment' of those four realms, 'in the same order in which they were created'.[84] Thus, on the fourth day God said: 'Let there be lights made in the firmament of heaven to divide the day and the night' (Gen 1:14). The 'firmament of heaven' here referred to both the fixed firmament and the *aether*, as Bede was quick to note, and the 'lights' were the fixed stars and the planets.[85] In Bede's view, these celestial lights were incredibly bright, lighting up the region of the aether with their radiance, but their light was dispersed and weakened by the cloudy *aer* to the effect that from the human vantage point the stars and planets appear merely as pinpricks of light.[86] After the creation of the stars and the planets, God made 'two great lights. A greater light to rule the day and a lesser light to rule the night and the stars. And he set them in the firmament of heaven' (Gen 1:16–17). These greater and lesser lights were the sun and the moon, respectively. From this point on, the great light that marked the day from the night would be inexorably attached to the path of the sun. Bede felt that the sun and the moon must have been created perfect—it was logical to assume, therefore, that the first moon had been a full moon and the first sunrise a vernal equinoctial sunrise (the first season of the world, as Bede had already argued, had been the spring).[87] This had a further corollary: the first creation was also the first Easter. This was no coincidence—in Bede's vision of creation, the liturgical calendar was hard-wired into the rhythms of the cosmos.[88] It is worth flagging up this aspect of Bede's thought. Whereas, in modern understanding, feast days, and indeed the seven-day week, are cultural contrivances, arbitrarily imposed by humans on a nature that follows no such rhythm, for Bede these things were a part of the cosmic order instituted by God at the beginning of time.[89] The rhythm of the created cosmos and the annual celebration of the Easter feast were fundamentally intertwined.

The fifth day

On the fifth day, the water and the *aer* were 'adorned' just as the realm of fire had been on the fourth. It was appropriate that they be adorned at the same time, thought Bede, because water and air were particularly interconnected 'as the nature of the waters is very near to the quality of the air'.[90] Indeed, as Bede remarked, the lower *aer*, which was thought to be denser and murkier

than the upper *aer*, 'is shown to be thickened by waters' vapours, so that it forms clouds and can sustain the flight of birds'.[91]

> "Let the waters bring forth the creeping creature having life and the bird over the earth under the firmament of heaven". And God created the great whales and every living and moving creature which the waters brought forth according to their kinds, and every winged bird according to its kind.
>
> (Gen 1:20–1)

By this was meant all fish and sea-creatures, explained Bede, 'not only creeping and swimming and flying creatures, but also those which, not being adapted for any form of locomotion, cling fast to the rocks, as is the case with many kinds of shellfish'.[92] Unlike Adam, who would initially be created immortal, the other creatures were mortal from the start. They were made 'in such a way that either they would die as nourishment for others or they would perish in their declining age from the lack of same'.[93]

The reference to birds flying 'over the earth under the firmament of heaven' raised some issues of interpretation. How could this statement, which seemed to imply that birds fly close to heaven, be made to fit within Bede's classical cosmography? Bede recognized that the passage might seem at first to cause an issue, but he argued that, in fact, it 'offers no obstacle to the framework of truth'.[94] It is indisputable, after all, that birds fly *over* the earth; they also fly *under* the firmament of the fixed stars, even if that firmament lies at an immense distance above them. There was thus no lie in what Scripture said. The Vetus Latina version of Genesis, however, stated that the birds fly *near* the firmament (*iuxta firmamentum*). Again, this was not a problem according to Bede: the region of the *aether*, after all, is sometimes referred to as the 'firmament of heaven' and birds do in fact fly in the upper region of the *aer*, which is located just under the *aether*.[95]

The sixth day

Finally, on the sixth day, the earth was adorned with its own living things. It was fitting, according to Bede, that the earth should be adorned after the water, because the former derives its life-giving properties from the latter.[96] This 'adornment' took the form of the creation of 'the beasts of the earth according to their kinds and cattle and every creeping thing of the earth after its kind' (Gen 1:25)—these land animals formed, according to Bede, 'out of earth or waters' (*ex terra uel aquis*).[97] The climax of the creation narrative came when God 'created man to his own image' (Gen 1:27). The idea that humanity was said to have been created in God's image suggested a number of things to Bede. Borrowing from Augustine, he noted that this likeness is first and foremost a likeness of the mind, but that it is also reflected in man's physical form. Man, unliked the animals, walks upright: 'therefore his body is suited to a rational soul'.[98] Although Scripture

does not make it explicit, Bede was of the opinion that 'the female also was created in the image of God, on account of the fact that she too had a rational mind'.[99] The human body was formed by God 'of the mud of the earth' (Gen 2:7)—that is from the material elements—but the human soul was created 'out of nothing by the inspiration of God' (*de nihilo deo inspirante*).[100] Eve, meanwhile, was formed out of a rib from Adam's side, something which happened, according to Bede, simply for the sake of its symbolic meaning.[101]

The day of rest

On the seventh day, God 'ended his work which he had made: and he rested on the seventh day from all his work which he had done' (Gen 1:2). The creation of the world was completed in six days, according to Bede, in part because six is a 'perfect' number, in that it is the first number made up of its own factors. That the world had been made in six days, then, was a symbol of cosmic perfection:

> *Sex ergo diebus perfecit deus omnem ornatum caeli et terrae, ut qui omnia in mensura et numero et pondere constituit ipso etiam numero in quo operaretur sua opera doceret esse perfecta.*
>
> God completed all the ornamentation of heaven and earth in six days, so that he who constituted all things in measure, and number, and weight might teach even by the very number of days in which he worked that his works had been perfected.[102]

Bede was careful to note that this notion of God's rest was not in conflict with John 5:17, where Jesus had proclaimed that God 'is working until now'. God's 'rest' was a cessation from the creation of any new species. But the Creator is still a presence in the world, advised Bede, 'from that time right up until the present' (*deinceps usque nunc*), working

> *eorundem generum administrationem quae tunc instituta sunt, non ut ipso saltim die septimo potentia eius caeli et terrae omniumque rerum quas condiderat gubernatione cessaret.*
>
> at the governance of those same species which were instituted at that time, so that his sovereign power did not rest from governing heaven and earth and all the things that he had created even on that seventh day itself.[103]

In fact, if God were to truly cease his governance, all created things would immediately 'fall into ruin' (*dilabi*).[104] In a very real sense, then, Bede's cosmogony went beyond the bounds of the literal six-day creation. His understanding of divine economy, like his patristic forefathers, was bound up in the notion that God's involvement in the unfolding of creation was continual and immanent.[105]

The earthly paradise and the golden age

After creation but before the Fall, the world existed in a state of perfection. Humankind, at this point, did not know sin. They lived in blissful paradise, immortal and untouched by misfortune. This prelapsarian world operated according to a different set of rules to the contemporary universe. Not least of these divergences lay in the functioning of the human body. Adam and Eve were immortal in Eden, though, as Bede was at pains to point out, this immortality differed from the immortality that the elect would enjoy at the end of time. Adam was immortal, he explained, 'in the sense that he could not die if he did not sin; but if he sinned, he would die'.[106] Adam's immortality, in other words, was provisional. He would live 'with the aid and support of temporal nourishment, he would be free of death and pain, until he was brought by bodily sustenance to the age determined upon by the Creator'.[107] Or as Bede put it elsewhere: 'Adam was made immortal, in that he could not die if he kept the command; but the children of the resurrection will be immortal, in that they can never die nor be affected by the fear of death'.[108]

Bede's understanding of the prelapsarian body drew heavily on Augustine. Indeed, on this topic, Bede hewed quite close to the Augustinian line in *In Genesim*, often quoting the Bishop of Hippo at length. Though some exegetes had understood that Adam and Eve had been purely spiritual in Eden and that the postlapsarian punishment was a fall *into* materiality, Bede followed the Augustinian interpretation—that Adam and Eve inhabited flesh-and-blood bodies in paradise, albeit ones that differed in important respects from those of postlapsarian humans.[109] For one thing, their bodies were not subject to concupiscence or corporeal desire. They lived naked in paradise, because their bodies were not stirred by any shameful appetites: 'there was no motion in the body for which modesty was owed' (*nullus erat motus in corpore, cui uerecundia deberetur*).[110] This was a vision of a 'rational' body, in which the desires of the flesh were absent, and which obeyed the will of the uncorrupted soul. Given this, Adam and Eve could also, at least in theory, have had sex in Eden, not in the pursuit of lust but in order to procreate. Augustine had made this argument, in an important break with many of his contemporaries, whose view of the marriage bed was highly negative,[111] and Bede followed him implicitly here. Of course, before the Fall, childbirth would not have been a painful or dangerous occasion—they could have had children, said Bede, 'without any of the labour and pain of giving birth' (*sine ullo labore ac dolore pariendi*).[112] Not only was the human body in perfect accord with the soul, but the human mind was more in tune with the divine. Adam, according to Bede, lived a life 'glorified by the frequent vision and spoken message of God and angels on earth'.[113] Furthermore, the language of Eden (which Bede believed was Hebrew) was less degenerated than contemporary language, which would later be thrown into confusion after the destruction of the Tower of Babel.

The physical world too was different before the Fall. Two interpretations of the prelapsarian world had generally held sway in Christian exegetical

tradition: one held that the Garden of Eden was unique in its arcadian perfection and that the world outside its walls was not so fecund or beautiful, even at the world's beginning; another held that the 'garden' described in Scripture was simply a metaphor for the fact that the entire earth had enjoyed paradisal conditions.[114] Bede does not fall into either category—he seems to have believed that the paradise in which Adam and Eve were placed was a particular location in the east, but that the entire world partook in the prelapsarian perfection of a perfect nature. Where the author of *De ordine creaturarum* speculated about the possibility of Adam and Eve leaving paradise and wandering the prelapsarian earth, Bede had little to say about the topography of the earth at this time—paradise was what was described in Genesis and that is what he was interested in exploring.

Bede described the Garden of Eden in richly evocative terms. In doing so, he was providing the latest iteration in a venerable tradition: the imagining of a past Golden Age (a tradition briefly surveyed in Chapter 1). The imagery he deployed in describing such a time had been formed in the writings of Basil, Ambrose, Avitus of Vienne and many others. Bede's commentary on Genesis 1:29–30 is a quintessential imagining of a natural world shorn of all negative traits. According to Bede, Scripture clearly implies that before the sin of man, 'the earth produced nothing harmful—no poisonous plant, no unfruitful tree'.[115] As was often the case in such imaginings, Bede defined Eden by reference to its absences—its lack of poisonous plants and unfruitful trees are what position this landscape as a perfect version of nature. Similar language reappears in one of Bede's homilies, in which the prelapsarian life of Adam was described as 'sublime in its incomparable light and peace' and 'clear of every cloud of stinging cares'.[116]

Scripture had it that God had given every plant and tree to men and birds and all living creatures of the earth 'as food' (Gen 1:29–30). It therefore followed, according to Bede, that there were no carnivores in this prelapsarian era. Instead:

> *patet quia nec ipsae aues raptu infirmorum alitum uiuebant, nec lupus insidias explorabat ouilia circum, nec serpenti puluis panis eius erat, sed uniuersa concorditer herbis uirentibus ac fructibus uescebantur arborum.*
>
> it is clear that the very birds did not live by stealing the food of weaker animals, nor did the wolf search out an ambush around the sheepfold, nor was the dust the serpent's food, but that all things in harmony fed upon the green plants and the fruits of the trees.[117]

This image of a harmonious animal world represents a complex palimpsest of allusions. Bede borrowed the image of the wolf and the sheepfold from Vergil's Georgics.[118] The image of wild animals turned tame was a convention of classical depictions of the Golden Age, and Vergil's line was, in fact, a conscious pastiche of such *topoi*.[119] Hexaemerists like Basil and Ambrose had drawn on classical imagery of the Golden Age in order to round out

their picture of the earthly paradise, as we have seen. Indeed, it was generally understood by Christians that Vergil and other Golden Age poets had been recording a folk memory of the real Golden Age recorded in the Bible. In this sense, it was permissible to draw on such literature in Christian contexts. Bede's use of Vergil, therefore, places him in a long tradition of Christian borrowing from classical Golden Age poetry.[120] The phrase *rapto uiuere*, 'to live by stealing', was common in classical Latin and was used of birds of prey.[121] Finally, such images of animal harmony also suggested to Bede a biblical passage, Isaiah 65:25, which spoke of how 'the wolf and the lamb shall feed together; the lion and the ox shall eat straw; and dust shall be the serpent's food: they shall not hurt nor kill in all my holy mountain'. The circumstances described in Isaiah's prophetic vision, generally understood by Christians as a reference to apocalyptic reunion with God, could also be used to describe the conditions of earth in its unblemished infancy. This passage from Isaiah also tied in to the fact that the serpent, as punishment for the Fall, would be forced to 'eat dust'. Despite the fact that the Book of Genesis was relatively short on details about animal life before the Fall, then, Bede, thanks to his concordance method of working, was able to piece together a relatively clear picture of the prelapsarian animal world. Adam, of course, had dominion over all the animals (Gen 1:26). What this seems to have meant for Bede was that the animals ministered to and served Adam and Eve, just as some animals did for holy men in contemporary saints' *uitae*.[122]

As was often the case in such arcadian visions, in Bede's perception of the prelapsarian world nature produced food spontaneously for humankind and there was no need to work the land. 'Those who sought earthly fruits', said Bede, 'were supplied with nourishment without any labour'.[123] This idea, inherited ultimately from the language of the classical Golden Age, led to a dissonance in the Christian interpretation of prelapsarian Eden. Surely Adam did not lead a life of indolence in Eden? On the other hand, could it be that God had condemned Adam to labour before his sin? This was a tricky question but the answer was at hand. Genesis 2:15 states that after creating Adam, God placed him in the Garden of Eden 'that he might work it and keep it' (*ut operaretur et custodiret illum*). According to Augustine, and after him Bede, this implied that Adam had farmed the land in Eden.[124] Working the land before the Fall was a very different prospect from contemporary farming: it was not the back-breaking labour that it would later become. Rather, said Bede, 'there was no distress of labour, but a delight of the will'.[125] In this way, Bede was able to retain the image of an abundant prelapsarian nature, while also avoiding the implication that Adam had been idle in Eden.

Although nature in general declined with the Fall, the Garden of Eden itself was untouched (Adam and Eve were, after all, expelled from Eden). Indeed, according to many medieval writers, the earthly paradise was still in existence. Bede accepted this idea without question: 'we cannot doubt that this place was *and is* on earth'.[126] But although it still existed, paradise

was separated from the habitations of humankind by an immeasurable expanse of either ocean or land.[127] The exact location of the earthly paradise had been the subject of some speculation amongst exegetes. Where the Vulgate spoke of God planting a paradise of pleasure 'from the beginning' (*a principio*), the Vetus Latina had it that God had planted Eden 'towards the east' (*ad orientem*). From this, some scholars had assumed that paradise had been placed in the eastern part of the world, beyond Asia. Bede was cautious about endorsing this idea and careful to note that it was speculative: as he put it at one point, 'some wish it to be understood' (*nonnulli uolunt intellegi*) that paradise is located in the eastern part of the *orbis terrarum*, 'but whether it be there or elsewhere, God knows'.[128] At other times, however, he seems to have implicitly accepted the idea that paradise was located in the east. This interpretation underlies his particular reading of Genesis 4:16 (in which Cain is described as dwelling 'at the east side of Eden'), for instance.[129] It also jibed with his reading (based on statements elsewhere in Genesis) that the first humans 'inhabited the region of the east'.[130] Indeed, Bede's vision of early human history, as laid out in *In Genesim*, posited a connection between moral degeneration and movement *away* from the east, both typologically and actually:

> *erat autem omnis terra labii unius et sermonum eorundem, quamdiu homines in oriente permanserunt. At ubi ab oriente pedes mouerunt, mox propter uerba siue opera superbiae et ab inuicem disiuncti, et a suo sunt creatore longius expulsi. Orientis plaga unde mundus ortu siderum lumen accipere solet, ipsum recte significat, qui ait, ego sum lux mundi; qui sequitur me non ambulat in tenebris sed habebit lumen uitae … Profecti de oriente inuenerunt campum in quo habitarent, quia recedentes a luce iustitiae reprobi, latas seculi uias sibimetipsi in quibus fluxa mente manerent, inuenerunt.*
>
> "And the whole earth was of one tongue and of the same speech" (Gen 11:1), as long as men remained in the East. But when they directed their feet away from the East, they were soon not only separated from each other but driven further from their Creator because of their words and deeds of pride. The region of the East from whence the world regularly receives light from the rising of the heavenly bodies, properly signifies the very One, who says, "I am the light of the world; he that follows me, walks not in darkness, but shall have the light of life" (John 8:12) … And having removed "from the East, they found a plain in which to dwell" (Gen 11:2), because, retreating from the light of justice, the wicked found for themselves the broad highways of the world in which to carry on in their dissolute state of mind.[131]

The idea that Eden was located in the east, then, tied in nicely with Bede's typological interpretation of the east. The east was associated with light, connection to God and the origins of the human race. As we shall see in

future chapters, the east also had connections to the interim paradise and to Christ's return on the Day of Judgement.

This eastern location was also important in that it tied in to ideas about the four rivers of paradise. According to Genesis 2:10–14, the spring that watered paradise divided into four branches—the Phison, the Gehon, the Tigris and the Euphrates—traditionally identified with specific rivers in the known world.[132] The Tigris and the Euphrates matched up to the famous rivers with those names; the Phison was usually identified with the Ganges and the Gehon with the Nile (though some preferred alternative identifications—the Canterbury commentator, for instance, thought that the Phison was to be identified with the Rhône and the Danube).[133] Given the far-removed nature of Eden, the way in which these rivers made their way to the *oikoumene* was a matter of some discussion. Bede followed the usual explanation: the four rivers, though they originated in paradise, entered the ground again and ran hidden under the earth until they emerged in various spots in 'our earth' (*nostra terra*).[134] He even linked this idea to the Plinian notion of which he was so fond of an earth riddled with 'veins'. In Pliny, he had read that the Nile, the Euphrates and the Tigris were known to travel underground for some intervals during their course.[135] To Bede, this fact was evidence of the probability that these rivers also travelled 'through more hidden cavities and longer veins of the earth from paradise to us'.[136]

Bede touched upon another aspect of the topography of paradise in *In Genesim*, in a comment that is extremely brief but that would have important ramifications for later medieval tradition. According to Bede, paradise was of such an altitude that 'not even the waters of the Flood, which deeply covered all of the surface of our world, were able to reach it'.[137] This opinion about the extreme altitude of Eden would become an extremely popular reading in later centuries; it was restated by such influential thinkers as the author(s) of the *Glossa ordinaria*, Peter Lombard, Alexander of Hales, Bonaventure and Thomas Aquinas—and was eventually immortalized in Dante's depiction of the earthly paradise (it wasn't until the Reformation that scholars began to prefer the idea that paradise had not, in fact, survived the Flood).[138] The enduring popularity of this idea in the Latin West seems to have originated with Bede's terse statement in *In Genesim*.[139] It was probably not an entirely novel idea by Bede, however. There were a number of pre-Bedan traditions that made similar claims. The Book of Ezekiel, according to some readings at least, seemed to imply that the earthly paradise was sat atop 'God's holy mountain' (Ezek 28:14), and Greek and Syriac exegetes—such as Ephrem the Syrian—held that Eden was located atop a tall mountain and had thus survived the Flood.[140] It is difficult to determine how this belief might have been transmitted to Wearmouth-Jarrow, but one possible conduit is the school at Canterbury founded by Theodore and Hadrian, where there was a familiarity with many exegetical ideas derived from Greek and Syriac theologians.[141] The biblical glosses that survive from Canterbury contain a number of references to the lofty height of paradise.[142]

Bede's description of the altitude of paradise was expressed rather differently to the Canterbury glosses, however. A more likely conduit for this image of paradise may be found in the form of late antique biblical epic poetry. The *Alethia* of Claudius Marius Victorius (which Bede quoted in his *Vita sancti Cuthberti metrica*) depicted paradise in the east, 'on a prominent hillock' (*editiore globo*).[143] Avitus of Vienne, also known to Bede,[144] wrote that paradise was atop a mountain in the east.[145] The specific link between the height of paradise and escape from the Flood was made in Lactantius's *De aue phoenice*, whose portrayal of the Phoenix's home 'was formed by the Judaeo-Christian conception of the mountain of paradise'.[146] That work described its paradise in classical terms: 'When the sky had blazed with the fires of Phaethon, this place was safe from the flames, just as it overcame Deucalion's flood when the deluge submerged the world'.[147] This is not too far from Bede's wording. Unfortunately, we have no other evidence that Bede was familiar with Lactantius's poem (though a century after Bede's time an Old English poet would adapt *De aue phoenice* into a vernacular poem, *The Phoenix*).

Wherever he derived it from, the idea that paradise was situated at such an altitude that it had escaped the waters of the Flood was a plausible reading for Bede and one that would have ramifications for his wider cosmographical understanding. According to Scripture, the waters of the Flood had risen to a height 15 cubits above the mountains (Gen 7:20). As was well known, the tallest mountain in the world was Mount Olympus, whose peak was held to touch 'the boundary between the *aer* and the *aether*' (*aeris aetherisque confinium*),[148] and Augustine had argued forcefully that the Flood had covered even the peak of Olympus, reaching as high, therefore, as the *aether*.[149] The details of the Flood's height also lay behind Bede's interpretation of the story of the Tower of Babel (Gen 11:1–9). Bede drew on a tradition that went back to Josephus that held that the tower had been built to be tall enough to survive another Flood.[150] Christian writers before Bede had already placed the tower of Babel narrative in the context of a classical cosmography, stating that Nimrod's edifice had sought to reach above the *aer* as far as the *aether*.[151] According to Bede, the Babylonians had built the tower so that, 'if the waters of a flood should again assail the lands, they might seek the upper regions of the *aer* or of heaven [by which Bede means the *aether*] by its means'.[152] In his commentaries on Mark and Luke, Bede was even more explicit about the height of the Flood: 'the water of the Flood, which exceeded the peaks of the mountains by fifteen cubits, is not believed to have reached beyond the boundary between the *aer* and the *aether*'.[153] The implication of all of this was that the earthly paradise, if it were to have escaped the Flood, must have been located in the *aether*. This reading has the advantage of jibing with some of the other statements that Bede made about the earthly paradise. The 'incomparable light' enjoyed by Adam would, for instance, suggest a high altitude, as the lower down in the universe one goes, even in the prelapsarian cosmos, the murkier it is; in the *aether*, 'all is clear and

filled with the light of day'.[154] As we shall see in Chapter 7, there are further reasons to suspect that Bede had a particular image in his head of a paradise located in the *aether*. It is worth noting, however, that Bede never referred to this elevated position as a *mountain*; he thus side-stepped one of the objections of later Christian writers to the idea of an elevated paradise, namely how paradise could have survived when Scripture specifically states that the Flood covered all the mountains (Gen 7:19).[155]

Fall and decline

The wonderful fecundity and order of prelapsarian nature was not to last. Chapter 3 of Genesis recounted how Adam and Eve, having disobeyed God's order not to eat of the tree in the middle of paradise, were expelled from Eden. God first cursed Eve: 'I will multiply your sorrows, and your conceptions: in sorrow shall you bring forth children, and you shall be under your husband's power, and he shall have dominion over you' (Gen 3:16). He then said to Adam:

> Because you have hearkened to the voice of your wife, and have eaten of the tree, whereof I commanded you that you should not eat, cursed is the earth in your work; with labour and toil shall you eat thereof all the days of thy life. Thorns and thistles shall it bring forth to you; and you shall eat the herbs of your earth. In the sweat of your face shall you eat bread till you return to the earth, out of which you were taken: for dust you are, and into dust you shall return.
>
> (Gen 3:17–19)

After this, Adam was expelled from paradise 'to till the earth from which he was taken' (Gen 3:23), and God closed paradise off from humankind by placing a Cherubim with a flaming sword to guard its gate (Gen 3:24). Christian interpretation of this narrative was mixed, but there was a general agreement that the punishment of Adam and Eve was cosmic in its ramifications, accompanied by changes in the nature of human bodies and in the condition of the physical universe.

The Fall had physical consequences for the human body. 'We became mortals', remarked Bede, 'after sin'.[156] Along with mortality came the possibility of injury and suffering. Specific afflictions, such as 'the pain and sorrow of childbirth' (*dolor et gemitus parientis*), appeared after the Fall, arising 'from the body of death' (*ex corpore mortis*).[157] As we have seen, Bede followed Augustine in asserting that in Eden Adam and Eve had been capable of intercourse but that the concupiscence that defines postlapsarian sexuality had been absent.[158] After their sin, however, the knowledge of evil had been introduced to the human equation—and with it, fleshly lust. 'When they perceived themselves to be naked', said Scripture, Adam and Eve 'sewed together fig leaves, and made themselves aprons' (Gen 3:7).

Where the relationship between soul and body had once been a rational one, in which the soul was in no wise perturbed by 'bodily motions' and there was no need to cover the body, the mind was now tugged by carnal desires and Adam and Eve recognized the need to cover up: 'the rational soul', said Bede, 'blushed for the bestial motion in the members of its own flesh, and struck shame into it'.[159]

There were consequences in the animal kingdom as well. The serpent, for one, was transformed. The particular creature who tempted Eve in the Garden was understood to have been possessed by the Devil, but Christian exegetes still accepted that it had been a real live serpent. God cursed the serpent, saying:

> because you have done this thing, you are cursed among all cattle and beasts of the earth: upon your breast shall you go, and earth shall you eat all the days of your life. I will put enmities between you and the woman, and your seed and her seed: she shall crush your head, and you shall lie in wait for her heel.
>
> (Gen 3:14–15)

This curse applied to the Devil, to be sure, but also, as Bede explained, to 'the irrational serpent itself' (*ipse serpens irrationalis*) and to its descendants.[160] Where serpents had been allowed before the Fall to feed together with the other animals on plants and fruits, they were now 'commanded to eat the physical earth' (*terram materialem comedere iubetur*).[161] The serpent was also the enemy of Eve and her descendants in the sense that snakes, as Bede explained, are 'the general enemy of all the animals and beasts of the earth on account of the bane of poison that has been implanted in him'.[162] This poison was not present before the Fall but was 'implanted' (*insitus*) in the serpent 'at the time of the curse, and not before' (*a tempore maledictionis huius, et non ante*).[163] Like Vergil, Bede had presented the harmless wolf and the innoxious serpent as characteristic features of an arcadian nature. Their present inimicality, by the same token, was symptomatic of a fallen world.

The poison of serpents was only one of the many dangers that now lurked in nature. The Fall also precipitated 'thorns and thistles' (Gen 3:18), a phrase that was interpreted allegorically but was taken to refer to physical reality as well. For medieval readers, the phrase 'thorns and thistles' functioned synecdochically, representing not simply two new plant strains introduced into creation, but all of the imperfect and dangerous elements which were now let loose in the world (Augustine stood out in his belief that thorns and thistles had always existed but that they only became threatening to humanity in their postlapsarian state).[164] Before the Fall, said Bede, the earth only brought forth 'crops of food and fruitful trees' (*herba pabuli et ligna fructuosa*), but now 'we see that many wild and barren things spring up' (*uidemus multa horrida et infructuosa nasci*).[165] 'Poisonous plants', he asserted, 'were created for the punishment and for the torment of mortals'.[166] This was not

in order that the earth itself might punished, said Bede, but 'so that it should put the crime of human sin always before men's eyes, whereby they should from time to time be reminded to turn away from sins and toward the commands of God'.[167] The natural world, as interpreted through this paradigm, was both symptom and symbol of the sinfulness of humankind. Yet, the natural world was not entirely imperfect, even now. In fact, God had purposefully left reminders of Edenic perfection on earth in order, as Bede said, 'in order to urge us through a nearby example to deserve its restoration' (*ad promerendum eius reditum de uicino nos admoneret exemplo*).[168] This understanding of the exhortatory and didactic character of nature's postlapsarian decline is paralleled, as we shall see, in Bede's vision of history.

Although the Fall represented the first and most drastic degradation of nature, there were other moments in history in which the decline of the postlapsarian cosmos continued to advance. The most conspicuous such moment was the Flood, which had devastated the world at the time of Noah. According to Scripture, God, seeking to punish a sinful humanity, warned Noah that he would 'bring the waters of a great flood upon the earth, to destroy all flesh, wherein is the breath of life, under heaven. All things that are in the earth shall be consumed' (Gen 6:17). God arranged for it to rain for 40 days and nights, and the earth was overcome by the waters of the Flood, which reached 'fifteen cubits higher than the mountains' (Gen 7:20). The Flood lasted for 150 days, during which time all the people and animals of the earth were destroyed, save Noah and those that were with him on the ark. The waters of the Flood had done more than simply advance and recede—they had left a fundamentally changed world in their wake (2 Pet 3:6). Bede's attempts to explain the mechanics of the Flood were innovative and drew on his understanding of cosmology and physics.[169] One question particularly concerned him: how did the waters actually come to gather together on the face of the earth in this way and how were they dispersed? In order to explain, Bede once again turned to Pliny and the 'veins of the earth'. According to Scripture, 'the waters returned from off the earth going and coming' (Gen 8:3). By this, said Bede, Scripture clearly meant to imply that the waters returned 'through the hidden veins of the earth to the originating abyss'.[170] In fact, according to Bede in somewhat of a digression, this return of the Flood waters through the 'hidden veins' is what King Solomon had been referring to when he had said 'all the rivers run into the sea, yet the sea does not overflow; unto the place from whence the rivers come they return to flow again' (Eccl 1:7). In connecting these biblical passages to the veins of the earth, Bede was again proceeding under the assumption that the cosmos described in Scripture corresponded exactly with the one that he had detailed in *De natura rerum*.

Bede's ideas about the Flood were also developed outside of his commentary on Genesis. In an early commentary on 2 Peter that was probably written soon after 709, he discussed the topic in some detail. There he argued that the statement that God 'did not spare the primordial world'

(2 Pet 2:5) meant that the antediluvian world was significantly different to the world after the Flood—the former had been entirely destroyed. After all, 2 Peter 3:6 said that 'that world [which existed] then was deluged with water and perished'. The destruction wreaked by the Flood was, however, localized. The 'world' that had perished according to Scripture included the 'heavens' (2 Pet 3:7), but Bede interpreted 'heavens' here as 'all the regions of this turbulent *aer*' (*cuncta aeris huius turbulenti spatia*).[171] The land, too, was changed to another appearance by the waters. Here we glimpse one of the more curious features of Bede's cosmogony—the notion that the surface of the primeval globe had been more level, with fewer peaks and troughs, than now. Mountains and valleys, in other words, were a by-product of the battering the earth received during Noah's Flood and a sign of degeneration from a perfect, ordered and rational world.[172] Bede admitted that some mountains and valleys were believed to have existed since the beginning of creation, but these were not as immense as they are now. Although he had borrowed it in part from Augustine, Bede's name would be the one associated with this idea in later centuries.[173] The most fascinating aspect of this discussion is the fact that Bede found evidence for the idea in his own observation of the natural world. 'Even now', he noted, 'we see the appearance of the land changed every year by the eroding waters'.[174] He reasoned that this process must have been even greater during the Flood, 'in proportion to the stronger and longer-lasting force of the waters that surged up over and washed away the land'.[175] This points to the way in which Bede approached natural philosophy—he was happy to seek answers to scriptural questions in the natural world, because he did not expect there to be any discrepancy between scriptural truth and knowledge gained from observation. How Bede squared this idea with the extreme altitude of Eden is difficult to discern, though it is worth noting that Augustine had had no problem with the idea that, although mountains in general were absent from the antediluvian world, Mount Olympus had existed before the Flood.[176]

According to *In Genesim*, the Flood also saw a further change in the relationship between human and animal. Where humankind had up until this point followed a vegetarian diet, God now declared to Noah and his family: 'every thing that moves and lives shall be meat for you' (Gen 9:3). From this, said Bede, it was clear that animals, birds and fish were 'granted to them to eat, just as they received vegetables for consumption up to the Flood'.[177] With this, the last vestiges of prelapsarian faunal harmony had been discarded. Another step in the degeneration of humanity's original state came with the destruction of the Tower of Babel. In paradise, Adam and Eve had lived in harmony with God, without any confusion or miscommunication. Even after the expulsion from paradise, according to Bede, humans were able to communicate freely with one another as they all spoke the same language: as Scripture had it, 'the earth was of one tongue and of the same speech' (Gen 11:1). This shared language, according to Bede, was Hebrew. After the building of the tower of Babel, however, God declared 'let us confound their

tongue, that they may not understand one another's speech' (Gen 11:7). With this, the one language of humanity was split into 72 different languages, and humanity fell even further from the harmony of Eden.

Another traditional idea linked to cosmic degeneration was the *topos* of the world grown old. Augustine had connected the six ages of man, the six days of creation and the six Ages of the world; since the time of Christ, the world had been experiencing the sixth and final of these eras, 'in which the senility of the old man appears'.[178] Bede followed and expanded upon Augustine's model in his *De temporum ratione*, describing a sixth age that he associated with senility and death.[179] As we shall examine further in Chapter 8, Bede spoke of the coming end of the world as being presaged by many signs which were reflective of the decrepitude of the earth—earthquakes, the crumbling of the mountains, the falling of the stars and the darkening of the sun.[180] Unlike other proponents of 'world-grown-old' imagery, Bede never quite made it clear whether he was speaking metaphorically or literally or both, but there is nevertheless an implication that the breakdown of the natural world at the end of time was due to its advanced age. The *meaning* of these events lay in their eschatological symbolism, but the *cause* was simply the advanced age of the universe—things were beginning to come apart at the seams. In this way, Bede married physical causation with moral and spiritual history—just because there was, as it were, a 'natural' reason for the cosmos's decline did not mean that this decline was not also spiritually and eschatologically significant.[181]

A theme that runs through *In Genesim* and Bede's other writings is the possibility of reclaiming some portion of the lost perfection of nature. The elect were to fully reclaim this excellence in the eternal rest after the Day of Judgement, of course, but even before then some holy individuals would be able to reclaim in part some of the conditions of the prelapsarian world. According to Bede, some saints had been granted the dominion over animals that Adam had enjoyed in Eden, and he adduced this fact in *In Genesim* as proof of the prelapsarian power enjoyed by humanity:

> *testimonium primae creationis legimus uiris sanctis atque humiliter deo seruientibus et aues obsequium praebuisse, et rictus cessisse bestiarum et uenenum nocere non potuisse serpentium.*
>
> as evidence of the first creation, we read not only that birds have rendered obedience to saints humbly serving God, but also that they have been spared from the yawning jaws of wild beasts, and that the poison of serpents has been unable to harm them.[182]

In other words, those stories—so familiar from hagiographical tradition—of saints being ministered to by birds (such as Cuthbert and Paul),[183] being spared from the jaws of beasts (such as Saturus and Antony)[184] or vanquishing serpents (such as Columba)[185] suggested to Bede that the holy men and women of Christendom were in some way capable of regaining

the original conditions of paradise.[186] This restoration of Edenic conditions was not limited to the animal world, however. In his prose *Vita s. Cuthberti*, Bede again drew attention to the link between Adam's prelapsarian dominion over the natural world and the miracles of contemporary saints. After recounting the story of the eagle who provided Cuthbert with food, Bede noted that 'not only the creatures of the *aer* but also of the sea, yes, and even the sea itself, as well as air and fire … did honour to the venerable man'.[187] This should not be not surprising, Bede informed his readers, for 'if a man faithfully and wholeheartedly serves the maker of all created things, it is no wonder though all creation should minister to his commands and wishes'.[188] The rest of humanity, on the other hand, who have not achieved the piety of the saints, 'lose dominion over the creation which was made subject to us, because we ourselves neglect to serve the Lord and Creator of all things'.[189] By the same token, the original unity of tongues was regained by Christ's disciples at Pentecost. According to the Book of Acts, after receiving the Holy Spirit, the disciples began to speak 'with diverse tongues' so that every person who listened to them preach 'heard them speak in his own tongue' (Acts 2:4–6).[190] This temporary moment of common understanding, said Bede, showed what the lot of humanity would have been had they served God humbly after the expulsion from paradise:

> *Quanta autem hominum esse felicitas posset etiam paradiso deiectorum, si uel tunc creatori suo seruire humiliter uellent, testatur gratia eiusdem domini conditoris ac redemptoris nostri, qui discipulis sibi fideliter adherentibus misso desuper spiritu omnium notitiam tribuit linguarum.*
>
> But how great the happiness of men could be, even after having been cast out from paradise, if even then they would serve their Creator humbly, Scripture declares by the grace of our same Lord Creator and Redeemer, who conferred the knowledge of all languages upon the disciples who faithfully adhered to him by the Holy Spirit sent from above.[191]

The Apostles, 'who had humbly applied their hearing to the truth' (*qui humiliter ad auditum ueritatis adposuerant*), were allowed, through the grace of God, to reclaim some measure of this lost unity of tongues, even if only temporarily.[192] In all of these examples, Bede stressed the fact that the saints had been able to reclaim these powers because they had been 'humbly' (*humiliter*) serving God; according to Bede, it was in this sense that they imitated Adam, who before his Fall had '[subjected] himself humbly to [God's] governance and protection' (*ipsius se dominationi ac protectioni humiliter subdendo*)[193] and who had been 'subject to and humbly dependent upon the grace of his Creator' (*subditus humiliter adhaerens gratiae sui conditoris*).[194] Humility and dependence on God was an important feature of Bede's understanding of grace, as we shall see further in Chapter 6.

Conclusion

On the face of it, Bede's reading of the creation is entirely of a piece with traditional Christian interpretations. He presented his commentary on Genesis as a collation of patristic thought, drawing on the expensive works of Basil, Ambrose and Augustine. But here, as elsewhere, Bede's rhetorical declarations of unoriginality mask a furiously critical mind at work on a project of imaginative synthesis. In *In Genesim*, Bede laid out his own conception of the origins of the cosmos: it is an account that has been meticulously thought-through, consistent with all that he knew of physics, theology and the 'nature of things'.

In fact, Bede's approach to cosmogony is a good example of his working methods more generally: he sought to build on the work of patristic and early medieval scholarship on creation, drawing conclusions that strayed far from the text of Genesis but that were built on a series of logical steps from some basic assumptions; he deployed his usual practice of 'concordance exegesis', tying the conditions of the prelapsarian paradise to a passage from Isaiah and linking the miracle of Pentecost of Acts with the unity of tongues that existed before Babel; he drew on natural philosophical traditions in order to explain, for instance, how the waters of the Flood had come and gone; he even turned to his own observation of the natural world, seeing in the erosion of shorelines a proof of the steady degeneration of the world over its lifetime.

Notes

1 For some discussion, see Jones, 'Some Introductory Remarks'; Kendall, *Bede: On Genesis*, 28–36; C. O'Brien, 'Bede on Creation', *Revue Bénédictine* 123 (2013), 255–73.

2 A useful overview is to be found in P.M. Blowers, 'Doctrine of Creation', in S.A. Harvey and D.G. Hunter (eds), *The Oxford Handbook of Early Christian Studies* (Oxford, 2008), 906–31. Cf. P.M. Blowers, *Drama of the Divine Economy: Creator and Creation in Early Christian Theology and Piety* (Oxford, 2012); T. O'Loughlin, *Teachers and Code-Breakers: The Latin Genesis Tradition, 430–800* (Turnhout, 1999); L.J. Swift, 'Basil and Ambrose on the Six Days of Creation', *Augustinianum* 21 (1981), 317–28; P. Bouteneff, *Beginnings: Ancient Christian Readings of the Biblical Creation Narratives* (Grand Rapids, MI, 2008).

3 Kendall, *On Genesis*, 47–52. The perceived difference in approach between these two books led Charles W. Jones to suggest separate dates of composition, but, as Kendall has convincingly argued, if there was a gap between the two it must have been a short one (Jones, *Opera exegetica*, viii–ix; Kendall, *On Genesis*, 41–4).

4 For the dating of these additional books, see Kendall, *On Genesis*, 45–53, 323–6.

5 Edited and discussed in F. Rädle, 'Bedas Hymnus über das Sechstagewerk und die Weltalter', in K.R. Grinda and C. Wetzel (eds), *Anglo-Saxonica: Beiträge zur Vor- und Frühgeschichte der englischen Sprache und zur altenglischen Literatur Festschrift für Hans Schabram zum 65. Geburtstag* (Munich, 1993), 53–73; cf. Darby, *Bede and the End of Time*, 88–9. In *Historia ecclesiastica* 5.24, Bede mentions that he had composed a 'book of hymns' (*liber hymnorum*) (ed. Lapidge, SC 491, 192). If we accept that our hymn is to be included in this collection, this

gives us a *terminus ante quem* of *c*.731. Peter Darby has argued that the sophisticated Seven Ages schema apparent in the hymn places it in the post-708 period (Darby, 'Bede's Eschatological Thought', unpubl. PhD dissertation, Univ. of Birmingham, 2009, 334). Within this broad range (708–31) it is not possible to be more precise, though it is worth noting that the poem's preoccupations closely mirror those of *In Genesim*; perhaps it was composed at the same time as that work's first book, in or around 717–18.

6 Jones, 'Some Introductory Remarks', 115.

7 J.F. Kelly, 'Bede's Use of Augustine for his *Commentarium in principium Genesis*', in F. Van Fleteren and J.C. Schnaubelt (eds), *Augustine: Biblical Exegete* (New York, 2004), 192.

8 Kendall, *Bede: On Genesis*, 28.

9 O'Brien, 'Bede on Creation'.

10 T. O'Loughlin, *Teachers and Code-Breakers: The Latin Genesis Tradition, 430–800* (Turnhout, 1999).

11 Bede, *IG* praef. (ed. Jones, CCSL 118A, 1–2).

12 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192). See above, 34.

13 For much of what follows I am indebted to the clear overview provided in Blowers, *Drama of the Divine Economy*.

14 D. Sedley, *Creationism and Its Critics in Late Antiquity* (Berkeley, 2007).

15 Blowers, *Drama of the Divine Economy*, 169–73; G. May, *Creatio ex nihilo: The Doctrine of 'Creation out of Nothing' in Early Christian Thought* (Edinburgh, 1994); F. Young, ''Creatio ex nihilo': A Context for the Emergence of the Christian Doctrine of Creation', *Scottish Journal of Theology* 44 (1991) 139–51.

16 Ambrose, *Hex.* 1.3 (ed. Schenkl, CSEL 32.1, 7; trans. Savage, 7–8): 'quam bonus ordo, ut illud primum adsereret quod negare consuerunt et cognoscerent principium esse mundi, ne sine principio mundum esse homines arbitrentur'.

17 Blowers, *Drama of the Divine Economy*, 139–87.

18 Ambrose, *Hex* 1.7 (ed. Schenkl, CSEL 32.1, 25): 'primo facta, postea conposita'.

19 Philo, *Allegorical Interpretation of Genesis 2, 3* 1.2 (LCL 226, 146; trans. LCL 226, 147).

20 Blowers, *Drama of the Divine Economy*, 145–66; Swift, 'Basil and Ambrose on the Six Days of Creation'.

21 Augustine, *DGAL* 4.33 (ed. Zycha, CSEL 28.1, 131–3).

22 F.E. Walton, *The Development of the Logos Doctrine in Greek and Hebrew Thought* (Bristol, 1911).

23 D. Boyarin, 'The Gospel of the Memra: Jewish Binitarianism and the Prologue to John', *The Harvard Theological Review* 94 (2001), 243–84; E.L. Miller, 'The Johannine Origins of the Johannine Logos', *Journal of Biblical Literature* 112 (1993), 445–57; M.J. Edwards, 'Justin's Logos and the Word of God', *Journal of Early Christian Studies* 3 (1995), 261–80.

24 Blowers, *Drama of the Divine Economy*, 46–52; G.L. Prestige, *God in Patristic Thought*, 2nd ed. (London, 1952), 35–7, 116–28.

25 Ambrose, *Hex* 1.4.15 (ed. Schenkl, CSEL 32.1, 13).

26 On the way in which the 'beginning' of Genesis 1:1 was equated with Christ as beginning, see Blowers, *Drama of the Divine Economy*, passim.

27 Augustine, *DGAL* 6.10 (ed. Zycha, CSEL 28.1, 182).

28 M. Colish, *The Stoic Tradition from Antiquity to the Early Middle Ages*, 2 vols., (Leiden, 1985), I, 32.

29 C. Köckert, 'The Concept of Seed in Christian Cosmology: Gregory of Nyssa, *Apologia in Hexaemeron*', *Studia Patristica* 47 (Leuven, 2010), 27–32; Colish, *The Stoic Tradition from Antiquity to the Early Middle Ages*, II, 203–6; J.M. Brady, 'St. Augustine's Theory of Seminal Reasons', *New Scholasticism* 38 (1964), 141–58; M.C. Horowitz, *Seeds of Virtue and Knowledge* (Princeton, 1998).

30 R. Williams, 'Creation', in A.D. Fitzgerald (ed.), *Augustine Through the Ages: An Encyclopedia* (Grand Rapids, MI, 1999), 251–4, at 252.
31 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 5).
32 Augustine, *DGAL* 6.10 (ed. Zycha, CSEL 28.1, 182).
33 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192; trans. Kendall and Wallis, 74).
34 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 8; trans. Kendall, 73): 'non nostro more per sonum uocis corporeum fecisse credendus est'.
35 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 8).
36 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 11; trans. Kendall, 76): 'intellegamus quod in uerbo dei erat ut fieret, in quo faciendum intus ante omne tempus, praeuidit quicquid foras ex tempore deus fecit'.
37 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 3–4).
38 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 3; trans. Kendall, 68).
39 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 3; trans. Kendall, 68).
40 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 40; trans. Kendall, 106).
41 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 44).
42 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 35; trans. Kendall, 100): 'deinceps autem usque nunc operatur eorundem generum administrationem quae tunc instituta sunt'.
43 O'Brien, 'Bede on Creation', 264–5; Kendall and Wallis, *Bede: On the Nature of Things*, 136.
44 Indeed, even this language was drawn from Augustine's *De Genesi ad litteram*, something which has not been noted—compare Augustine, *DGAL* 4.12 (ed. Zycha, CSEL 28.1, 108): 'deinceps autem usque nunc et ultra operari eorundem generum administrationem, quae tunc instituta sunt'.
45 Augustine, *DGAL* 3.6 (ed. Zycha, CSEL 28.1, 68; trans. Taylor, 79): 'non igitur ignorabat naturas elementorum eorumque ordinem, qui cum uisibilium, quae intra mundum in elementis natura mouentur, conditionem introduceret'.
46 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 15; trans. Kendall, 80): 'decente satis ordine mundus ex materia informi congruam procedit ad formam'.
47 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 4).
48 For the logic that led Augustine (and later Bede) to associate the angels with the light created on the first day, see E. Muehlberger, *Angels in Late Ancient Christianity* (Oxford, 2013), 49.
49 Bede, *DTR* 5 (ed. Jones, CCSL 118A, 284–6; trans. Wallis, 20–1).
50 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 3; trans. Kendall, 68): 'quamuis utrumque simul ab homine dici non possit'.
51 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 15; trans. Kendall, 80): 'palam tamen significat cum has a deo inlustratas atque ad iussum eius ordinatas insinuat'.
52 Bede, IG 1.1 (ed. Jones, CCSL 118A, 5; trans. Kendall, 70): 'cum caelo in principio … nominatim facta memorantur'.
53 Bede, IG 1.1 (ed. Jones, CCSL 118A, 5; trans. Kendall, 70).
54 Bede, IG 1.1 (ed. Jones, CCSL 118A, 5); Eustathius, *In hexaemeron Basilii* 1.7 (ed. Amand de Mendieta and Rudberg, 12–13).
55 Bede, IG 1.1 (ed. Jones, CCSL 118A, 5; trans. Kendall, 70): '[deus creauit] superiorem illum et spiritalem cum suis incolis mundum et informem totius huius mundi materiam'.
56 For an overview, see D.C. Lindberg, 'The Genesis of Kepler's Theory of Light: Light Metaphysics from Plotinus to Kepler', *Osiris* 2 (1986), 4–42; J.A. Mazzeo, 'Light Metaphysics, Dante's 'Convivio' and the Letter to Can Grande della Scala', *Traditio* 14 (1958), 191–229; A.M. Smith, *From Sight to Light: The Passage from Ancient to Modern Optics* (Chicago, 2015); Miles, 'Vision: The Eye of the Body and the Eye of the Mind in Saint Augustine's "De trinitate" and "Confessions"', *The Journal of Religion* 63 (1983), 125–42.

57 Mazzeo, 'Light Metaphysics', 193.
58 Augustine, *DGAL* 4.28.45 (ed. Zycha, CSEL 28.1,127; trans. Hammond Taylor, 136): 'neque enim et christus sic dicitur lux, quomodo dicitur lapis, sed illud proprie, hoc utique figurate'.
59 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 7–8).
60 Bede, *IG* 1.1.4 (ed. Jones, CCSL 118A, 9; trans. Kendall, 74): 'superni est seculi fixa ac perpetua luce perfrui'.
61 Augustine, *DGAL* 1.12 (ed. Zycha, CSEL 28.1, 17–19).
62 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 8; trans. Kendall, 73): 'patet profecto quia in superioribus eiusdem terrae partibus, quas et nunc diurna solis lux inlustrare consueuit, tunc principalis illa lux emicuit'.
63 Bede, *DTR* 5 (ed. Jones, 287; trans. Wallis, 22): 'hoc tantum a solari luce differens quod caloris fotu carebat et, quia sidera nondum erant, priscis adhuc tenebris noctes illas relinquebat obscuras'.
64 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 9; trans. Kendall, 75): 'uiginti scilicet et quatuor horarum'.
65 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 8); cf. Eustathius, *In hexaemeron Basilii* 2.6 (ed. Amand de Mendieta and Rudberg, 26); Ambrose, *Hex*. 1.9 (ed. Schenkl, CSEL 32.1, 35).
66 This view of the 'naturalness' of divine works was a characteristic of early medieval theology—the most sustained example of this type of argumentation is found in Augustinus Hibernicus's *De mirabilibus sacrae scripturae*. See further discussion in Chapter 6, 155–9.
67 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 10).
68 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 10).
69 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 11): 'non uaporali tenuitate sed solidate … glaciali'.
70 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 11): 'fixa possint statione manere'.
71 Kendall, *Bede: On Genesis*, 28.
72 Comments at, for instance, Bede, *IG* 1.1.14 (ed. Jones, CCSL 118A, 15).
73 Pliny, *NH* 66 (ed. Rackham, LCL 330, 300).
74 Bede, *IG* 1.1.9 (ed. Jones, CCSL 118A, 13; trans. Kendall, 78): 'terra ipsa longe lateque iussu creatoris subsidens alias partes praeberet concauas quibus confluentes aquae reciperentur'.
75 Bede, *IG* 1.1.9 (ed. Jones, CCSL 118A, 13; trans. Kendall, 78): 'ut appareret arida ex his partibus unde humor abscederet'.
76 Bede, *IG* 1.1.9 (ed. Jones, CCSL 118A, 13; trans. Kendall, 78): 'nam et fossores hoc puteorum probant, quia tellus omnis per inuisibiles uenas aquis est repleta manantibus quae trahunt ex mari principium'.
77 Below, 155.
78 D. Wootton, *The Invention of Science: A New History of the Scientific Revolution* (New York, 2015), 111–17, provides a good overview, with a bibliography at n11.
79 Bede, *IG* 1.1.9 (ed. Jones, CCSL 118A, 15; trans. Kendall, 80).
80 Bede, *IG* 1.1.9 (ed. Jones, CCSL 118A, 13; trans. Kendall, 78): 'lux quae praeterito biduo aquas clara lustrabat, clarior puro in aere splendesceret'.
81 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 14; trans. Kendall, 79): 'in hoc enim solent herbae uirentes apparere in terra et ligna pomis onustari'.
82 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 14; trans. Kendall, 80).
83 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 41; trans. Kendall, 107).
84 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 15; trans. Kendall, 80): 'quo creata sunt ordine'.
85 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 15).
86 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 16–17).
87 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 18).

88 Wallis, 'Caedmon's Created World', 102: '*computus* was not just a technique in the service of ecclesiastical discipline, but a manifestation of the divine and rational design of the physical universe according to "measure, number and weight"'.
89 E. Zerubavel, *The Seven Day Circle: The History and Meaning of the Week* (Chicago, 1985).
90 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 20; trans. Kendall, 85, modified): 'quia natura aquarum aeris qualitati proxima est'.
91 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 20; trans. Kendall, 85): 'exhalationibus earum pinguescere probatur ita ut et nubila contrahat et possit uolatus auium sustinere'.
92 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 21; trans. Kendall, 86): 'et reptilium et natatilium et uolatilium, sed et eorum quae nullo aptae incessui fixa cautibus inherent, ut sunt plurima concarum genera'.
93 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 22; trans. Kendall, 87): 'ut uel alia aliis in alimoniam cederant uel ipsa suo senio deficientia perirent'.
94 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 21; trans. Kendall, 86): 'nil rationi ueritatis obsistit'.
95 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 21).
96 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 23).
97 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 57).
98 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 26; trans. Kendall, 91): 'congruit ergo et corpus eius animae rationabili'.
99 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 28; trans. Kendall, 92): 'et femina enim ad imaginem dei creata est secundum id quod et ipsa habebat mentem rationalem'.
100 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 44; trans. Kendall, 109).
101 Bede, *IG* 1.2.24 (ed. Jones, CCSL 118A, 58).
102 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 32; trans. Kendall, 96).
103 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 35; trans. Kendall, 100).
104 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 35).
105 See further, below, Chapter 6, 154–9.
106 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 30; trans. Kendall, 95): 'ut possit non mori si non peccaret; sin autem peccaret, moreretur'.
107 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 30; trans. Kendall, 95): 'adminiculis adiuta temporalis alimoniae, mortis expers ac doloris existeret, donec corporalibus incrementis ad illam usque perductus aetatem quae conditori placeret'.
108 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 69; trans. Kendall, 136): 'adam ita immortalis factus est, ut possit non mori, si praeceptum seruaret; filii autem resurrectionis ita erunt immortales, ut nec mori umquam, nec metu mortis possint affici'.
109 D.G. Hunter, 'Augustine on the Body', in M. Vessey, *A Companion to Augustine* (Chichester, 2012), 353–64.
110 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 59; trans. Kendall, 125).
111 E.A. Clark, '"Adam's Only Companion": Augustine and the Early Christian Debate on Marriage', *Recherches Augustiniennes et Patristiques* 21 (1986), 139–62. On the different views of marriage in the late antique Church see, e.g., D.G. Hunter, '"On the Sin of Adam and Eve": A Little-Known Defense of Marriage and Childbearing by Ambrosiaster', *The Harvard Theological Review* 82 (1989), 283–99; E.A. Clark, 'Heresy, Asceticism, Adam, and Eve: Interpretations of Genesis 1–3 in the Later Latin Fathers', in her *Ascetic Piety and Women's Faith* (Leviston, 1986), 353–85.
112 Bede, *IG* 1.2.18 (ed. Jones, CCSL 118A, 53; trans. Kendall, 119).
113 Bede, *Homiliae* 1.12 (ed. Hurst, CCSL 122, 83; trans. Hurst, 117): 'crebra dei et angelorum fuerit uisione et allocutione glorificata'.

114 The two options are discussed in *DOC* 10.1–5 (ed. Díaz y Díaz, 156–8).
115 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 30; trans. Kendall, 94): 'nihil noxium terra protulit, nullam herbam uenenatam, nullam arborem sterilem'.
116 Bede, *Homiliae* 1.12 (ed. Hurst, CCSL 122, 83; trans. Hurst, 117): 'incomparabili luce et pace sublimis, ab omni curarum stimulantium nube serena'. A minor exegetical tradition held that prelapsarian light was of a higher quality than the degraded light that held sway in the present. Bede's reference here to the 'incomparable light' of Eden may indicate that he agreed with this idea.
117 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 30; trans. Kendall, 94).
118 Vergil, *Georgica* 3.537 (ed. Ribbeck, 170).
119 G.B. Miles, *Virgil's Georgics: A New Interpretation* (Berkeley, CA, 1980), 214–5; R.F. Thomas, 'Virgil's *Georgics* and the Art of Reference', *Harvard Studies in Classical Philology* 90 (1986), 171–98, at 187–8.
120 Peter Hunter Blair noted that the metre of this line of the Georgics was incorrectly reproduced in Bede's work; he suggested that Bede may have derived the line from some lost intermediary source (P. Hunter Blair, 'Bede to Alcuin', in G. Bonner (ed.), *Famulus Christi: Essays in Commemoration of the Thirteenth Centenary of the Birth of the Venerable Bede* (London, 1976), 239–60, at 249). Since this argument was made, however, it has been demonstrated that Bede was possessed of a detailed knowledge of Vergil (Wright, 'Bede and Virgil'; M. Irvine, *The Making of Textual Culture: 'Grammatica' and Literary Theory 350–1100* (Cambridge, 1994), 277–9).
121 Seneca, *Ep.* 121.18 (ed. Hense, 592): 'birds that live on plunder' (*aues rapto uiuentes*). Pliny, *NH* 11.60 (LCL 353, 530): 'birds of prey' (*aues rapto*).
122 Bede, *IG* 1.1.28 (ed. Jones, CCSL 118A, 29).
123 Bede, *Homiliae* 1.12 (ed. Hurst, 83; trans. Hurst, 117): 'nullo labore quaesitis alenda fructibus'.
124 Augustine, *DGAL* 8.8 (ed. Zycha, CSEL 28.1, 243).
125 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 51; trans. Kendall, 117): 'non … erat laboris adflictio sed exhilaratio uoluntatis'.
126 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 46; trans. Kendall, 111): 'nos tamen locum hunc fuisse et esse terrenum dubitare non licet'. Emphasis mine.
127 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 46).
128 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 46; trans. Kendall, 111): 'Verum siue ibi siue alibi sit, deus nouerit'.
129 Bede, *IG* 2.4 (ed. Jones, CCSL 118A, 80–1).
130 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 153; trans. Kendall, 228): 'plagam orientis tenuerunt'.
131 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 157–8; trans. Kendall, 233–4).
132 On the four rivers of paradise, see A. Scafi, *Mapping Paradise: A History of Heaven on Earth* (London, 2006), passim.
133 *Commentarius primus in Pentateuchum* 37 (ed. Bischoff and Lapidge, 311).
134 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 48–9).
135 Pliny, *NH* 5.10 (LCL 352, 256), 5.20 (LCL 352, 284), 6.31 (LCL 352, 434).
136 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 49; trans. Kendall, 115): 'ad nos de paradiso per occultiores terrae sinus uenasque longiores'.
137 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 46): 'nec quae diluuii, quae totam nostri orbis superficiem altissime cooperuerunt ad eum peruenire potuerunt'.
138 B. Nardi, 'Intorno al sito del "Purgatorio" e al mito dantesco dell'Eden', *Giornale Dantesco* 25 (1922), 289–300, at 294–7; Scafi, *Mapping Paradise*, 266–70.
139 Scafi, *Mapping Paradise*, 49–50.
140 See G.A. Anderson, 'The Cosmic Mountain: Eden and Its Early Interpreters in Syriac Christianity', in G.A. Robbins (ed.), *Genesis 1–3 in the History of Exegesis: Intrigue in the Garden* (Lewiston, NY, 1988), 187–224; R. van den Broek,

The Myth of the Phoenix According to Classical and Early Christian Traditions (Leiden, 1971), 311–20.

141 Bischoff and Lapidge, *Biblical commentaries from the Canterbury school*, 190–242.

142 *Commentarius primus in Pentateuchum* 35 (ed. and trans. Bischoff and Lapidge, 308–9): 'multi dicunt paradisum fiiisse creatum et supra aplanem collocatum, ibique hominem constitutum antequam praeuaricaret imperium Dei'; 'Many say that Paradise had been created and positioned above the *aplanes*, and man placed there, before he transgressed God's command'; *Commentarius primus in Pentateuchum* 47 (ed. and trans. Bischoff and Lapidge, 312–13): [regarding the flaming sword placed in front of paradise] 'uolunt esse aether'; 'they wish us here to understand the *aether*'; *Commentarius primus in Pentateuchum* 62 (ed. and trans. Bischoff and Lapidge, 314–15): [regarding the location to which Enoch was taken]

> *Deus transtulit eum ubi uoluit et homines ignorant: aut in insulas potuit transportare uel in montes quoslibet — ut est Olimpus supra aerem, ut dicunt — in quibus potuit facile abscondi, licet multi incerta de paradiso opinentur;*
>
> God transported him where He wished and men do not know where: He could have taken him either to islands or to certain mountains—just as Mt Olympus is located above the air, as certain sources allege—in which he could easily be hidden, even though there are many uncertain opinions concerning Paradise.

The glosses also preserve other traditions, however, such as the notion that the Garden of Eden was located in the same place as Jerusalem (*Commentarius primus in Pentateuchum* 35).

143 Claudius Marius Victorius, *Alethia* 1.225 (ed. Hovingh, CCSL 128, 125; trans. from Shanzer, 'Two Variations on the Theme of Paradise', 238).

144 Lapidge, *Anglo-Saxon Library*, 204.

145 Avitus of Vienne, *De spiritualis historiae gestis* 1.211–7 (ed. Peiper, MGH Auct. ant. 6.2, 209).

146 Van Den Broek, *The Myth of the Phoenix*, 319.

147 *De aue phoenice* 11–14 (ed. Brandt, CSEL 27.1; trans. K.N. Harris, *The De aue phoenice of Lactantius: A Commentary and Introduction*, PhD Thesis, University of British Columbia (1976), 50): 'Cum Phaethonteis flagrasset ab ignibus axis, / Ille locus flammis inuiolatus erat, / Et cum diluuium mersisset fluctibus orbem, / Deucalioneas exsuperauit aquas'.

148 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 216–17). Cf. Smyth, *Understanding the Universe*, 183–5.

149 Augustine, *DCD* 15.27 (ed. Dombart and Kalb, CCSL 48, 495).

150 Josephus, *Antiquitates Iudaicae* 4.2.113 (ed. Pollard et al.).

151 Augustine, *DCD* 16.4 (ed. Dombart and Kalb, CCSL 48, 505); Claudius Marius Victorius, *Alethia* 3.230–45 (ed. Hovingh, CCSL 128, 174–5).

152 Bede, *IG* 3.11 (CCSL 118A, 153; trans. Kendall, 229): 'si aquae diluuii rursum terris ingruerent, per hanc superiora aeris siue caeli spatia peterent'.

153 Bede, *In Marc*. 4.13.31 (ed. Hurst, CCSL 120, 602); *In Luc*. 6.21.33 (ed. Hurst, CCSL 120, 371): 'neque enim aqua diluuii quae quindecim tantum cubitis montium cacumina transcendit ultra aeris aetherisque confinia peruenisse credenda est'.

154 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 217): 'omnia pura ac diurnae lucis sunt plena'.

155 See, for instance, Walter Raleigh, *The Historie of the World* (Edinburgh, 1820), I, 95–6. As we shall see, Bede envisioned the interim paradise as being sat atop an impossibly tall wall—not a mountain—in the east.

156 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 68; trans. Kendall, 135): 'mortales post peccatum facti sumus'.
157 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 67; trans. Kendall, 134).
158 Clark, '"Adam's Only Companion": Augustine and the Early Christian Debate on Marriage'.
159 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 62; trans. Kendall, 128): 'anima rationalis bestialem motum in membris suae carnis erubuit eique incussit pudorem'; cf. Augustine, DGAL 11.32 (ed. Zycha, CSEL 28.1, 366).
160 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 66; trans. Kendall, 132).
161 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 66; trans. Kendall, 132–3).
162 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 66; trans. Kendall, 133): 'cunctis animantibus et bestiis terrae pro insita sibi peste ueneni generalis … inimicus'.
163 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 66; trans. Kendall, 133).
164 K. Pollman, 'Human Sin and Natural Environment: Augustine's Two Positions on Genesis 3:18', *Augustinian Studies* 41 (2010), 69–85, at 70.
165 Bede, *IG* 1.3 (CCSL 118A, 68; trans. Kendall, 135).
166 Bede, *IG* 1.3 (CCSL 118A, 68; trans. Kendall, 135): 'herbae uenenosae ad poenam uel ad exercitationem mortalium creatae sunt'.
167 Bede, *IG* 1.3 (CCSL 118A, 68; trans. Kendall, 135): 'ut peccati humani crimen semper hominibus ante oculos poneret, quo admonerentur aliquando auerti a peccatis et ad dei precepta conuerti'.
168 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 48; trans. Kendall, 113–14).
169 On the Flood in Bede's thought more generally, see D. Anlezark, *Water and Fire: The Myth of the Flood in Anglo-Saxon England* (Manchester, 2006), 44–111.
170 Bede, *IG* 2.8 (ed. Jones, CCSL 118A, 120): 'per occultas terrae uenas ad matricem abyssum'.
171 Bede, *IESC* 3.2.5 (ed. Hurst, CCSL 121, 270).
172 Augustine, *DGAL* 5.10 (ed. Zycha, 153–4).
173 M.H. Nicolson, *Mountain Gloom and Mountain Glory: The Development of the Aesthetics of the Infinite* (Ithaca, NY, 1959), 90.
174 Bede, *IESC* 3.2.5 (ed. Hurst, CCSL 121, 270; trans. Hurst, 137): 'etiam nunc omnibus annis terrarum faciem cerneremus aquarum subuersione mutatam'.
175 Bede, *IESC* 3.2.5 (ed. Hurst, CCSL 121, 270; trans. Hurst, 137): 'quanto maior ac diuturnior impetus aquarum terras obsidens alluebat'.
176 Augustine, *DCD* 15.27 (ed. Dombart and Kalb, CCSL 48, 117).
177 Bede, *IG* 2.9.1 (ed. Jones, CCSL 118A, 131; trans. Kendall, 204): 'illis edenda conceduntur, quomodo usque ad diluuium olera comedenda acceperunt'.
178 Augustine, *De Genesi contra Manichaeos* 1.23.40 (ed. Migne, col. 192): 'in quo senectus veteris hominis apparet'.
179 Bede, *DTR*, ch. 66 (ed. Jones, 464).
180 Darby, *End of Time*, 97–104.
181 See below, Chapter 6, 156.
182 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 29; trans. Kendall, 94).
183 *VCA* 2.5 (ed. Colgrave, 84–6); Jerome, *Vita Pauli* 10.2–3 (ed. Morales, SC 508, 166).
184 *Passio Perpetuae et Felicitatis* 19.5 (ed. Amat, SC 417, 170); Jerome, *Vita Malchi* 9 (ed. Morales, SC 508, 206–8).
185 Adomnán, *Vita Columbae* 2.28 (ed. Anderson and Anderson, 388–90).
186 This theme was developed by a number of patristic authors and seems to have been popular in Bede's immediate milieu. See now B. Brooks, *Restoring Creation: The Natural World in the Anglo-Saxon Saints' Lives of Cuthbert and Guthlac* (Woodbridge, 2019).
187 Bede, *VCP* 21 (ed. Colgrave, 224; trans. Colgrave, 225): 'Non sola autem aeris sed et maris animalia, immo et ipsum mare sicut et aer et ignis … uiro uenerabili praebuere obsequium'.

188 Bede, *VCP* 21 (ed. Colgrave, 224; trans. Colgrave, 225): 'Qui enim auctori omnium creaturarum fideliter et integro corde famulatur, non est mirandum si eius imperiis ac uotis omnis creatura deseruiat'.
189 Bede, *VCP* 21 (ed. Colgrave, 224; trans. Colgrave, 225): 'iccirco subiectae nobis creaturae dominium perdimus, quia Domino et creatori omnium ipsi seruire negligimus'.
190 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 152).
191 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 152; trans. Kendall, 227).
192 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 156; trans. Kendall, 231).
193 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 51; trans. Kendall, 117).
194 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 26; trans. Kendall, 90).

4 Soul and body

So far, I have kept my discussion, for the most part, to Bede's understanding of the material world. For Bede, this was the world formed from the four elements, created by God *ex nihilo* as formless matter and then shaped into the world we know over the course of the first six days. But this material world was only one part of all that was. There also existed an immaterial reality, invisible to the senses and detached from the mundane plane. This spiritual domain encompassed locations such as heaven and hell, as well as independent spiritual bodies such as the good and bad angels and—the subject of this chapter—the human soul.

A defining characteristic of European philosophical and theological thought from antiquity to the modern era has been an interest in the distinction between spirit and body. The 'mind-body problem', as such, did not exist in the middle ages, but the soul and its relationship to the body was a source of regular philosophical speculation. There have been countless studies of the spirit-body question in ancient philosophy and in the thought of patristic figures like Augustine,[1] as well as many works dedicated to the topic in later medieval thought, especially Scholasticism.[2] Generally speaking, however, the period between Augustine and Eriugena has not received much attention from intellectual historians interested in spirit and body. This seems to reflect a general feeling that the sixth through eighth centuries produced little of note in the field of philosophy more generally. But, as a recent burst of scholarship on the subject has made clear, writings from the Insular world in the early middle ages reflect a unique and complex perspective on questions of body, mind and soul.[3] We ought not, then, to pass over this area of Bede's cosmology—to do so would be to overlook a major aspect of his vision of the created world. Of course, the history of medieval and Christian ideas about the soul and the mind—and Bede's contribution to the same—is a large and complex topic, and one to which I cannot hope to do justice here. As such, I will be concerned primarily with the physics (for want of a better word) of the soul and its relationship to the body. In other words, I will approach Bede's understanding of human psychology from a cosmological perspective.

Incorporeality and immateriality

Before proceeding any further with discussion of Bede's views on the soul, it is important to first establish Bede's understanding of the divide between material and spiritual substances. It might at first seem perverse to explore such an issue. Bede is rarely anywhere to be found in modern studies of the history of the philosophy of matter and space.[4] A quick perusal of his writings reveals that he never spent much time tackling such questions head on. His reading—wide though it was for his time and place—would not have provided him with detailed information regarding such questions: he had no access to the Greek and Roman philosophical texts that discussed such matters, and the Christian authorities on whom he drew much of his cosmology were often equivocal on this question. Yet it is clear that, despite these obstacles, he was able to arrive at a relatively considered position. In order to unpick his beliefs in this regard, it will be necessarily to provide a brief synopsis of the history of antique thought regarding the divide between the corporeal and the incorporeal.

The modern conceptualization of the relationship between soul and body has been shaped by the thought of René Descartes, who, in the seventeenth century, named the three substances that make up existence as body, soul and God.[5] Body, for Descartes, was defined by spatial extension, it was *res extensa*. Mind, on the other hand, was *res cogitans*, and had no extension in space whatsoever—it was completely abstracted from physical reality (God, being infinite, was distinct both from body and soul). Despite superficial similarities, we must be careful about projecting a Cartesian model back onto the thought of pre-modern philosophers and theologians. A clear-cut Cartesian substance dualism was not present in the exact same form in ancient philosophy and theology, even though, at first glance, it might appear so.[6] A widespread ancient belief, for instance, accords with the basics of Descartes's definition of body: for the Stoic philosophers, and those Christians who emulated them, body was defined as something with resistance and with extension in length, breadth and depth.[7] The Stoics, however, entirely rejected the idea that there could exist substances that were not body—for them, something like a soul or a spirit *was* a body, albeit an extremely fine and insubstantial one.[8] Descartes's sharply defined dualism also has antique parallels. Many Platonists held that body was a fundamentally distinct thing from spirit—things such as God, angels and the soul were incorporeal.[9] But while they certainly advocated a sharp distinction between the corporeal and the incorporeal, they did not necessarily envision the latter category according to the Cartesian definition, as something without extension and therefore without location or spatiality. Many ancient thinkers did not, in fact, divide the world sharply between tangible matter and immaterial spirit; instead they conceived of, in the words of one scholar, 'a highly stratified and multifarious hierarchy of Being'.[10] In Christian circles, both the Stoic and Neoplatonist positions had their adherents. Tertullian, for instance, strongly influenced by Stoic ideas, insisted that souls, angels

and even God were bodily: 'everything that exists', he said, 'is a body of some kind'.[11] Tertullian's extreme Stoicism was soon discarded—few after the third century argued that God was a body[12]—but debate continued with regard to the nature of souls and angels.[13] For those who held to a strict Neoplatonist line, most notably Augustine, the idea that a spiritual substance had a *corpus* of any kind was untenable[14]: the soul is simply 'not contained by place' (*non loco contineri*) as bodies are.[15]

But what did it really mean to say that souls and angels were incorporeal? It can be difficult to pin down late ancient and early medieval thinkers' beliefs in this area because their writings lacked terminological precision. Even if an author described the soul as 'incorporeal' (*incorporeus*/*incorporalis*), this was no guarantee that they were thinking in terms of strict spatial and locational immateriality.[16] In fact, it seems that many thinkers saw no problem with imagining spiritual beings as a kind of middle substance, as not-quite-material, not-quite-immaterial entities. As one scholar has put it in a recent study, many patristic theologians understood 'corporeality and incorporeality not as two discrete states, but as properties that admit of degrees',[17] and many of them placed angels and souls somewhere on the spectrum between the two poles. Certainly there was a growing consensus among theologians from at least the fourth century that the angels, though they might not be bodies exactly, were *in some sense* circumscribed by place.[18] It seems evident that this grew out of a wish to differentiate them from God, whose immateriality and incorporeality were indisputable.[19] This was clearly the motive of Basil of Caesarea, for instance, when he wrote:

> *Ὁ γὰρ τῷ Κορνηλίῳ ἐπιστὰς ἄγγελος, οὐκ ἦν ἐν ταὐτῷ καὶ παρά τῷ Φιλίππῳ, οὐδὲ ὁ ἀπὸ τοῦ θυσιαστηρίου τῷ Ζαχαρίᾳ διαλεγόμενος κατὰ τὸν αὐτὸν καιρὸν καὶ ἐν οὐρανῷ τῆν οἰκείαν στάσιν ἐπλήρου. Τὸ μέντοι Πνεῦμα ὁμοῦ τε ἐν Ἀββακοὺμ ἐνεργεῖν καὶ ἐν Δανιὴλ ἐπὶ τῆς Βαβυλωνίας πεπίστευται · καὶ ἐν τῷ καταρράκτῃ εἶναι μετὰ Ἰερεμίου καὶ μετὰ Ἰεζεκιὴλ ἐπὶ τον Χοβάρ. «Πνεῦμα γὰρ Κυρίου πεπλήρωκε τὴν οἰκουμένην.»*
>
> The angel who stood by Cornelius was not at one and the same moment with Philip; nor yet did the angel who spoke with Zacharias from the altar at the same time occupy his own pose in heaven. But the Holy Spirit is believed to have been operating at the same time in Habakkuk and in Daniel at Babylon, and to have been at the prison with Jeremiah, and with Ezekiel at the Chebar. "For the Spirit of the Lord filleth the world" (Wis 1:7)[20]

A similar rationale guided theologians in the Latin West. John Cassian, drawing on Stoic ideas, stated categorically that, apart from God, the 'spiritual natures' (*spiritales naturas*), such as angels, human souls 'or indeed that subtle air' (*uel certe aer iste subtilis*), ought not to be considered incorporeal: 'for they have in their own fashion a body in which they exist, though

it is much finer than our bodies are'.[21] Gregory the Great offered a viewpoint that was neither Stoic nor Platonic but offered a relativist approach to the question of corporeality. Gregory felt that angels existed somewhere on a continuum between material human bodies and divine incorporeality: from a human point of view, he explained, angels seem like spirits, but in comparison to God they are bodily, 'for the spirits of the angels are certainly circumscribed by place'.[22] Gregory's definition of angels—not dualistic in either a Cartesian or Platonic sense—effectively divided bodies into three kinds: material, spatial substances (human bodies, animals); immaterial but spatially circumscribed substances (angels and perhaps souls); and immaterial and entirely non-spatial substances (God). This gradated view of corporeality was popular in the seventh century, particularly among Insular writers. The author of *De ordine creaturarum,* for instance, noted that angels were bound by place in a way that did not apply to God,[23] while an Insular grammarian writing on the continent felt that angels and souls are 'localized' (*locales*), but 'before human eyes they are incorporeal' (*ante oculos humanos incorporalia*).[24]

Even for those strict Platonists such as Augustine who argued for the absolute immateriality of spirit, it was difficult not to fall back on spatial and locational language in order to describe the behaviour of the angels or the human soul within the material world. There was an unresolved tension at the heart of ancient Christian ideas about spirit and body. In the later middle ages, this tension would lead thinkers to posit a number of different solutions. Abelard, for instance, would develop an angelology that sought to square the circle between the incorporeality of spirit and angelic boundedness. He asserted that while angels were fundamentally immaterial beings without bodies, they could only *act upon* the material world in a circumscribed, located manner.[25] Peter Lombard arrived at a way of defining bodily location as opposed to spiritual location: while bodies were defined by extension or dimension (*ubi circumscriptiuum*), spirit could be defined by its relation to the space around it (*ubi definitiuum*).[26] Some kind of understanding along these lines is perhaps what Augustine was reaching for, but he never articulated a comparable solution. In fact, in at least some of his works, Augustine's arguments seem to reflect an intuitive belief in some sort of spatial or locational quality to spiritual beings.[27] This inescapable spatiality is demonstrated by an instance from his *De cura pro mortuis*, for instance, in which Augustine laid out his difficulty in understanding how the souls of saints can both reside in heaven and influence events at their tomb.[28] One possible explanation was that God, 'who is present everywhere and neither limited to our presence nor separated from us' (*qui est ubique praesens nec concretus nobis nec remotus a nobis*), was able to hear the prayers of the saints, who are in heaven, and just so happened to usually grant them at their tombs because that is most helpful in building faith.[29] Even Augustine's non-corporeal souls were thus impeded by location in some ways, unlike the omnipresent God. That Augustine was not

operating within a starkly dualistic framework is also suggested by a number of passages in his *De Genesi ad litteram*, where he spoke of some kinds of matter as being 'more incorporeal' than others: 'the finer the nature of a corporeal thing, the closer (*vicinius*) it is to the nature of *spiritus*'.[30] The upshot of all this is that the water was further muddied and a clear definition of the difference between spirit and body receded further from view. Instead of pursuing the Platonic soul-body distinction to (what seems to us in retrospect) its logical conclusion—a clear-cut substance dualism founded on bodily extension—many Christians seem to have been content to allow for the kind of ill-defined middle state between immateriality and materiality outlined above. As Gregory Smith notes, even a self-consciously Augustinian theologian such as Cassiodorus could happily repeat Augustine's argument for the soul's immateriality while at the same time discussing the soul as if it were circumscribed.[31]

This then is the context in which we should appraise Bede's discussion of the soul and other spiritual entities. Many of the authorities on whom Bede drew—Gregory the Great, Cassian—had explicitly discussed the relative embodied nature of souls and angels; Augustine, meanwhile, made statements that could be read in a number of different ways. Bede did not have access to the writings of any of the Platonic philosophers of antiquity, nor does he seem to have been aware of the works of Christian Platonists like Mamertus Claudianus: he would not have found much, therefore, in his library to pull him towards a strict substance dualism.[32] As we shall see in the next chapter, Bede explicitly described the angels as spatially circumscribed relative to God, borrowing his terminology directly from Gregory. His beliefs regarding the human soul were not as clearly articulated but I would argue that we should think of him as sharing the gradated view of most late antique theologians: the soul was not matter, like the body, but neither was it Cartesian spirit—it was eternal and incorruptible but in some sense bound by location and place.

One final note. Seventeenth-century philosophers distinguished spirit from body by defining the two with reference to spatial extension. Given the powerful influence of Cartesian philosophy on modern thought, it can at first appear that the more gradated early medieval view of spatiality collapses the differences between matter and spirit, leaving an unsatisfying and muddled grey area between the two types of substance. But it is important to note that for early medieval cosmologists there was a simple and clear distinction between matter and spirit: the former was inherently mutable, chaotic, subject to decay; the latter immutable, serene, eternal. When viewed through this lens, the line between the two substances could not be more clear-cut.

Soul and body

What were Bede's convictions regarding the soul and its relationship to the body? The soul in Bede's immediate milieu has been the subject of some

scholarship, particularly in studies concerned with Anglo-Saxon theories of mind.[33] These studies have generally been concerned with the overlap between soul (*anima*) and mind (*mens*), and a number have argued that there existed two competing traditions in Anglo-Latin and Old English literature: the first, derived from classical antiquity and patristic though, saw the soul and the mind as more or less cognate; the second, based on native or vernacular tradition, understood that the mind was a different thing to the soul.[34] Given the fact that Bede is usually placed firmly in the former camp and that the evidence for the latter view is generally found in literature from later centuries, this debate will not much impinge upon us here. Bede's writings on the soul and the mind—which were admittedly limited—have rarely been examined in their own right. In what follows, I will set out the ways in which Bede responded to traditional teachings on the soul and the ways in which this influenced his own presentation of human psychology and spirituality. Bede's vision of the soul stands as a perfect example of his thought process: borrowing from a wide variety of patristic theologians, but not in thrall to any, he formulated a synthesized conception of the soul that fit best with how he viewed the cosmos.

The body of beliefs regarding the soul inherited by Bede from patristic antiquity was neither monolithic nor necessarily rigidly prescriptivist.[35] Generally speaking, unlike in the 'enclosed' or 'hydraulic' models identified in some Anglo-Saxon texts, the soul was identified with the mind and the self, although there was no consensus about the exact overlap.[36] Ultimately, however, it was the soul, and not the body, that was seen as the locus of selfhood: in medieval narratives of death and dying it was the soul, after all, that represented the person—and was referred to by that person's name—not the corpse. For many Christian authors the terms 'soul' (*anima*, *animus*), 'mind' (*mens*) and 'heart' (*cor*) were more or less interchangeable.[37] Some characteristics of the soul were quite widely agreed upon. The soul was immortal. For Christians, this meant that it would never be extinguished but *not* that it had always existed: in an important break with Platonic thought, which was open to the idea that the soul pre-existed the body, the Church expressly condemned belief in the pre-existence of the soul in 543.[38] The soul was not material—it was most often described as *spiritus* or *incorporeus*. Yet, as we have seen, this terminology was used by many writers who departed from a sharply defined substance dualism; many took to thinking of the soul as something located on a spectrum between material body and immaterial God. Even if it was in a sense circumscribed and bounded by space, however, the soul was certainly not 'corporeal' (*corporeus*) or 'material' (*materialis*): it was not composed of any of the mutable, perishable elements that comprised the material world but was eternal, immutable, indivisible. The body, on the other hand, was certainly material.[39] According to the Book of Genesis, God had formed Adam 'from the mud of the earth' (Gen 2:7). From this, exegetes had taken it that the human body was formed from the material elements: a mixture of water and earth,[40] or even a combination

of all four elements.[41] This last theory had the benefit of according with Aristotelian and Hippocratic thought and explaining the mechanics of the humours. The body, then, was formed by God from the material universe that he created in the first simultaneous creation: it was formed of matter—corruptible, sensible, subject to decay. Adam, as Satan sneered in Avitus's epic poem *De spiritalis historiae gestis*, was nothing more than 'elevated dirt' (*leuata humus*).[42] Yet somehow this material body was the vessel for the intangible soul. Even the most learned theologians found it difficult to define the connection between the soul and the body. Augustine, for instance, pronounced himself unable to explain the close partnership between the two, calling it a combination accomplished by 'miraculous means' (*miris modis*)[43]; for Gregory, the fusion of such dissimilar substances was a wondrous paradox.[44] Yet while the unity of body and soul was cause for wonderment, no one doubted that this union of two disparate substances—one corporeal and mortal, the other incorporeal and eternal—was the best way of thinking about the human person.

Unlike Alcuin a generation later, Bede did not write any works dedicated to the topic of the soul, nor did he anywhere embark on a sustained reconsideration of received tradition.[45] There are, however, numerous remarks scattered throughout his body of writings that demonstrate that he possessed a particular and considered understanding of the soul and its workings. Early in his career, he made a number of comments that indicate that he conceived of the soul as in some sense 'incorporeal' (*incorporeus*). In his commentary on Luke, he twice quoted Augustine verbatim to this effect, baldly stating that 'the soul is incorporeal'[46] and describing it as the 'incorporeal part of man'.[47] As we have seen, however, the use of the term *incorporeus* is no indication that Bede was thinking in strict Platonist terms. Bede—who, like the Church Fathers, was not shy of emphasizing the fact of God's absolute incorporeal immateriality[48]—also appears to have struggled to define the 'incorporeality' of the soul in a way that did not detract from God's omnipresence. Like his predecessors, it is likely that he thought of the soul as bounded in some way by locational and spatial limitations: souls, in his narratives, seem to have a relationship to the space around them; they are depicted as travelling *through* space in a way that Augustine, for instance, always avoided. As to the origin of the soul, Bede stuck to the orthodox view, asserting that the soul had been made *ex nihilo*, not from earth as the body was,[49] and certainly not from God's own substance, as some had asserted.[50] The soul had been made separately to material creation—it was in fact the only substance that God made completely *de nouo* after the initial simultaneous creation.[51] Bede made occasional reference to the idea that the soul had three parts—reason, spirit and appetite—a traditional concept that went back to Plato.[52] Christians influenced by Platonism had read this tripartite model of the soul into Christ's command: 'You shall love the Lord your God with your whole heart, and with your whole soul, and with your whole mind' (Matt 22:37; Mark 12:30).

In his early commentary on Revelation, Bede made an oblique reference to the theory when he paraphrased a reading of Primasius's that the seven candlesticks (Rev 1:12) were a figure of the human being, who was composed of four bodily qualities and three qualities of the soul.[53] As Bede put it in *De tabernaculo*, 'our interior person is expressed by the number three when we are ordered to love God with all our heart and soul and character'.[54] In his commentary on Samuel, he made brief reference to a slightly different formulation of the same basic division of the soul into three 'aspects', using terminology that he most likely derived from Jerome or Cassian—the 'rational' (*rationabilis*), the 'spirited' (*irascibilis*) and the 'appetitive' (*concupiscibilis*).[55] Another tripartite model—a division of the person into soul, body and spirit—was also sometimes cited by Bede.[56] In general, however, he seems to have treated these various tripartite models as useful ways of thinking about the different *powers* or *activities* of the soul: he did not think that the soul could be literally divided into three physical 'parts' (*partes*)[57] or that each part was located in a different part of the body—his was a 'unitary soul'.[58]

Bede wrote even less about the particulars of the human body. That he had a relative lack of interest in this subject is suggested by the fact that he left out of *De natura rerum* all of Isidore's material on the humours and their effect on the body. He incorporated some of this information later in *De temporum ratione* but in a rather perfunctory manner, his interest clearly lying more in the way in which the human body mirrored the wider universe than in the physiological information itself.[59] He clearly had access to a number of late ancient medical texts, but he drew on them infrequently and his pronouncements on matters of the body were more often shaped by theological concerns than medical ones.[60] Bede understood that Adam had been created from 'the mud of the earth' (*de limo terrae*) and that the human body was thus composed of the element of earth, or perhaps a combination of more than one element (he was not entirely clear on this point).[61] One point of interest lies in the fact that Bede seems to have believed that food was not reduced by being digested by the body.[62] Jesus himself appeared to have implied as much when he said that 'anything that enters the mouth, goes into the belly, and is expelled into the privy' (Matt 15:17; cf. Mark 7:18–19). Jerome had insisted that this was to be taken literally,[63] and Bede agreed, explaining:

> *Quamuis enim tenuissimus umor et liquens esca cum in uenis et artubus concocta fuerit et digesta per occultos meatus corporis quos graeci πόρους uocant ad inferiora delabitur et in secessum uadit.*
>
> In fact, even the thinnest liquid or liquefied food, once it has been digested and dissolved in the veins and organs, flows through hidden channels of the body (which the Greeks call πόρους) to the lower parts and is discharged into the privy.[64]

As to the part of the body responsible for digestion, Bede knew from his reading that it was the liver: 'for they say that foods that have been eaten are boiled down and digested by means of the heat and hidden power of the liver'.[65]

When it came to the location of the soul in the body, Bede also adhered to the opinion of Jerome: 'from the heart, says [Mark], come evil thoughts; therefore the principal seat of the soul is not, as Plato said, in the brain but rather, as Christ said, in the heart'.[66] The brain also had a role to play: its anterior part was, as Bede knew, the central point 'from which all the senses are distributed' (*unde sensus omnes distribuuntur*).[67] But though our thinking mind may seem to be situated in the brain, this is not so: 'thoughts', said Bede, 'arise from the hidden root of our heart, *as if* from the internal folds of our brain'.[68] While they may originate in the heart, though, 'thoughts are regulated by the mind' (*cogitationes mente disponuntur*).[69] In other words, the brain is a kind of secondary switchboard through which the will travels to the exterior world from the heart and the exterior world is channelled through the senses back to the soul. Bede's cardiocentric vision of the soul-body relationship may be surprising to those familiar with Anglo-Saxon scholarship. Malcolm Godden, in an influential article, argued that learned Anglo-Saxon writers hewed to an Augustinian tradition which placed the soul in the brain (as opposed to vernacular tradition which placed the soul in the heart).[70] More recently, Leslie Lockett has argued that most Anglo-Saxon writers located the soul in the heart and has positioned this as a local belief in contradistinction to the Augustinian cephalocentric model which was known only to the most learned.[71] Both arguments place far too much weight on the idea that there existed an orthodox Augustinian cephalocentric model. In fact, many Church authorities (Gregory, Jerome) had declared that the soul was located in the heart (and Augustine, for his part, argued against localizing the soul in the body though he acknowledged the role of the brain as the instrument by which the soul controlled the body).[72] It seems that it was only with the Carolingian rediscovery of Platonic writings that the cephalocentric model came to exert an appreciable influence.[73] Bede's explanation of a soul centred in the heart but operating *through* the brain is therefore not out of keeping with his immediate intellectual context. Inasmuch as we can tell from his terse references, Bede was an adherent to the idea found in a number of patristic texts that the soul, while not localized there, *uses* the brain as an instrument for governing the body.[74] He melded this idea with Jerome's belief that the soul *is* locatable in the body, but in the heart rather than the brain. As Lockett has shrewdly observed, this cardiocentric model had the advantage of corresponding with the readily perceptible sensations of the body: the tightening of the chest that comes with emotional excitement seems to indicate the presence of the mind/soul in that part of the body. The heart, then, is the centre of the self in the body, and the heart could therefore be used as a stand-in for the soul and for

the mind and its thoughts: the heart is where the self, the memory and the will reside,[75] and Bede described people thinking thoughts 'in their heart' (*in corde suo*).[76] Likewise, the *uiscera* (the internal organs) could be used as a general stand-in for the heart or the soul: to examine (*interrogare*) one's *uiscera*, for instance, meant to look into one's heart or soul[77]; the fact that Judas's *uiscera* were said to have burst from his middle when he hanged himself was apposite, thought Bede, because it was the *uiscera* (in other words, the heart/soul) 'which had devised the treachery of betrayal' (*quae dolum proditionis conceperant*).[78]

This connection between soul and body, wherever it might be localized, was severed at death. There was certainly no disagreement among mainstream Christian writers (with some early exceptions) about the fact that the soul left the body at death.[79] That this post-mortem soul could be perceived and even recognized (and that it could itself recognize others) was also an uncontroversial feature of late antique Christian belief. This was the theme of a number of chapters in the fourth book of Gregory's *Dialogi*, in which it was related that Peter, Gregory's interlocutor, could not see souls leaving the body at death and therefore questioned the truth of the soul's immortality. Gregory advised faith, admonishing Peter for trying 'to see invisible things with corporeal eyes' (*corporeis oculis rem videre invisibilem*), but he also added that many people who had cleansed the eyes of the mind through prayer and faith had in fact been able to see souls departing to heaven.[80] Many theologians also agreed that the soul maintained some characteristics of its human body even when separated from it. Augustine had logically derived this from examples such as the story of the rich man who, while undergoing torment in hell, recognized Lazarus in heaven (Luke 16:22–3).[81] This could explain the way in which souls could be recognized either by each other or by living people who saw them. The reported vision of a holy soul's ascent to heaven was a commonplace of hagiography and martyrology from an early period.[82] Such stories were to be found in Gregory's *Dialogi*, Gregory of Tours's *Historiae*, Athanasius's *Vita s. Antonii*, Adomnán's *Vita s. Columbae*, amongst many others. Bede, in his *Historia ecclesiastica* and his *uitae* of Cuthbert, recounted the miraculous visions granted to some individuals in which they apprehended the souls of the dead leaving their bodies and ascending to heaven: Cuthbert, on two separate occasions, saw the souls of holy men ascending to heaven[83]; on Chad's death, a witness saw the soul of his brother, Cedd, descend from heaven and ascend again with Chad's soul[84]; and two nuns in two different locations saw Hild's soul ascending to heaven in the company of angels.[85] We might be inclined to question whether these visions corresponded with what 'really' happened to the souls of these saints—visions, after all, could often be metaphorical or symbolic. But it is clear that in Bede's mind, the soul of a saint was always transported to heaven by angels, even when there was no miraculous vision associated with their death: no visions accompanied the deaths of Hereberht and Cuthbert, for instance, but Bede was confidently able to assert

that the two monks, who had died within minutes of each other, were 'carried together to the heavenly kingdom by the service of angels'.[86]

There was no little disagreement in Christian circles about the possibility of the soul leaving the body before the moment of death. For some Christian authorities, it was clear that the soul could leave the body only at death[87]; for others, there was a possibility of the soul wandering independently of the body before death, at least for the very holy.[88] Bede included in his *Historia ecclesiastica* the stories of two men—Fursa and Dryhthelm—whose souls travelled to the afterlife before being returned to their bodies.[89] These incidents have most often been discussed by modern historians in the context of medieval 'vision literature',[90] as part of a tradition of 'visions of the hereafter reported by people on the brink of death or after a deep coma'.[91] Indeed, the contemporary 'out-of-body experience' is a common filter used by historians to think about these episodes.[92] Yet, as Jesse Keskiaho has noted, when Bede and his contemporaries recounted such stories of otherworld journeys they made clear that their protagonists were not dreaming or experiencing a vision.[93] A *uisio* in early medieval conception was a very particular kind of experience, an internal mystical occurrence that imparted knowledge through spiritual sight.[94] A *uisio* did not involve externally projected souls. Rather, Bede wrote that both Fursa and Dryhthelm had died (to be miraculously returned to life soon after) and this was the mechanism by which their travel to the otherworld was facilitated. This emphasis on the death of the protagonist was a common feature of stories of soul-voyages to the afterlife. It is found in all such narratives that Bede was familiar with: the voyages of Peter, Stephen and the unnamed soldier recounted by Gregory the Great, Gregory of Tours's tale of St. Salvius and Sulpicius Severus's story of the unnamed catechumen revived by St. Martin—in all cases the voyager was described as having first died.[95] These were no internal visions, like that experienced by St. Paul.[96] Nor were they stories of souls projected outwards during sleep, as per the classical tradition.[97] Rather, these were instances in which a person died and, through divine intercession, was revived again: God, wrote Gregory, 'allows some souls to return to their bodies shortly after death' (*disponit ut nonnulli etiam post exitum repente ad corpus redeant*) in order that they might provide a warning both to themselves and to others.[98] This emphasis on death has been noted by Isabel Moreira:

> In almost all accounts of Merovingian visionary travel, 'death was requisite for the soul's release. In part this convention was a theological necessity. Patristic writers asserted that the soul could not leave the body in dreams and therefore it could not travel to a world which was believed to exist elsewhere in time and space'.[99]

It is significant, indeed, that so few texts in our period slipped into talking about the soul voyaging out in dreams or leaving the body during an ecstatic vision.[100] We should not be surprised, then, to find that Bede had an equally

clear distinction in his mind between *uisiones* and extracorporeal soul travel. When depicting the latter, Bede hewed to the line established by his Merovingian antecedents: before any travel to the afterlife can take place, the soul must be detached from the body by death. 'When Fursa had been seized by illness', said Bede, 'he was snatched from the body and, free of his body from evening to cock-crow, was privileged to both look upon the sight of the flock of the angels and to hear their blessed songs of praise'.[101] The unfortunate Fursa was then 'restored to the body' (*reductus in corpore*), but two days later he was 'again led out' (*rursum eductus*) and travelled to heaven before being returned to the body again. In his portrayal of Dryhthelm's voyage, Bede was even clearer. By way of introduction to the narrative, Bede noted that 'a certain man, dead for some time, was restored to the life of the body'.[102] Like Fursa, Dryhthelm was stricken by an illness and 'he died in the early hours of the night' (*primo tempore noctis defunctus est*). He soon revived (*reuiuescere*), however, and recounted what he had seen of the afterlife.[103] Bede used the term *uisio* liberally throughout the *Historia*, but only in those cases that followed the Augustinian model of internal visions—he avoided the term entirely when discussing the post-mortem voyages of Fursa and Dryhthelm (he even at one point discussed a *uisio* experienced by Fursa—an episode clearly differentiated from Fursa's extra-corporeal travels).[104] In Bede's cosmology, then, a *uisio* was an entirely different type of phenomenon to an extra-corporeal soul journey. One was facilitated by internal spiritual sight, most often in dreams; the other necessitated the death of the body. To speak of the voyages of Fursa and Dryhthelm as 'dream visions' is to obfuscate the distinction between two medieval categories of experience; to treat them as 'near-death experiences' is to attempt to make sense of what happened to Dryhthelm and Fursa on our terms rather than on Bede's or his contemporaries'.

In any case—even setting aside for now miraculous resurrections à la Dryhthelm—the separation of body from soul at death was not the ultimate destiny of the individual. The soul and the body would be reunited again at the Day of Judgement—and it was in this revitalized, perfected amalgam of body and soul that the elect would exist eternally in heaven.[105] At first this image of a harmonious body-soul relationship might seem incongruous in a medieval Christian context which promoted asceticism and bodily mortification. But the simplistic dualistic model often applied to early Christianity can have the effect of smoothing out the complexities of Christianity's relationship with the body. Ancient and medieval Christianity often scorned and denigrated the body, but it also understood the body as something that, in cosmic terms, could be bettered, not something to be entirely transcended or discarded.[106] In the medieval worldview, the soul and the body were deeply intertwined in a way that complicates any attempt to view this era through the lens of a straightforward mind-body dualism. Indeed, a central aspect of Bede's intellectual inheritance was the understanding that the soul was not only a mover of the physical body—the software to the body's

hardware—but that the body could, in turn, influence the soul, as we shall see in the next section.

Demonic temptation, the passions of the flesh and the presence of the divine

Cartesian physics proposed a sharp distinction between matter and mind that effectively segregated the science of 'physics' from that of 'metaphysics' (this approach even led some early modern thinkers, such as Nicolas Malebranche, to argue that there was no direct causal link between matter and mind at all).[107] Cartesian dualism has shaped modern conceptualizations of the relationship between body and mind to such an extent that it can be difficult not to read early medieval texts through this lens. For Bede and his contemporaries, however, the line between the inner psychology of the individual and the exterior universe was not clear-cut. Far from being a closed system, the mind was connected directly to the wider cosmos, the soul subject to passions and emotions that arose outside the soul.[108] The divide between interior and exterior phenomena was a porous one. We cannot discuss Bede's conception of the physics of the soul, then, without touching on his understanding of human psychology.

Modern psychology deduces the existence of the 'unconscious', a set of mental processes separate from conscious cognition, an interior part of the self.[109] This model of the mind tends to think of unconscious and conscious thought as a whole—both originate from within the mind—but in previous eras of history the unconscious aspects of cognition were often understood as external to the self. Where dark thoughts, obsessions, disturbing dreams and impulsive and flighty thoughts are now seen as things produced by the mind, they were once seen as intrusions from outside it. According to late antique and early medieval Christian thought, these external influences on the soul could come from one of two places: from the body to which the soul was attached, or from outside the body entirely, from those evil spirits who were part of the Christian cosmos from its earliest period.[110] Whereas, before the Fall, the human body had been under the control of the will, the disordered postlapsarian nature of the fallen body meant that it no longer obeyed the soul's better impulses. The body was thus often framed as the main source of the passions and the locus of sin.[111] Scripture itself described how 'the flesh lusts against the spirit and the spirit against the flesh. They are in conflict with one another, and so you do not do the things you want' (Gal 5:17). As Augustine sought to highlight, however, the body was not the cause of all sin—the soul was perfectly capable of sin on its own, particularly the original sin of pride.[112] In Gregory the Great's influential discussion of the seven cardinal vices, meanwhile, only two of the seven were carnal.[113] For Augustine and Gregory, sin arose from the soul as much as from the body: it was not the case that the soul simply represented man's uncorrupted nature and the body was a straightforward prison of the soul. Rather, the postlapsarian soul was

divided against itself as well as against the body—this was no simplistic body-soul divide but a more complicated picture.[114] Nevertheless, the appetites of the body sowed the seeds for much sinful behaviour and, as the body was affected by the humours and by the turning of the seasons, this compelled individuals with particular bodily infirmities towards specific vices.[115] Thanks to the growth of ascetic monasticism in late antiquity, the demon also came to play prominent role in Christian discussion of the soul and sin. The influential literature by and about the Desert Fathers promoted a new psychological paradigm, according to which a thought might be planted by Satan in one's mind or a dream might be the work of demons.[116] Ultimately, this malign influence of the demons came via the body: the demons, by virtue of their airy nature, could tweak and tug at the body to provoke lustful thoughts.[117] Demons could not actually control the minds of men—as Cassian explained, they simply suggested and tempted based on the weaknesses they had already observed in their victims.[118] But although free will was never abrogated evil spirits were a constant presence in any person's life, tempting and cajoling the soul towards sinful thought and action. Gregory the Great spoke of 'evil spirits, besieging the minds of humans, until they force in criminal thoughts and tear the word of life out of the memory'.[119]

This power of demons to suggest evil thoughts was not, however, a negation of individual free will, nor were the bodily passions. The thoughts that demons or the body might plant in one's mind were only the first part of sinning. The consent of the soul was needed in order to complete the process. The Stoics, who had taught that emotion was to be avoided, had believed that before emotions came 'first movements' (*primi motus*) or 'pre-passions' (*propassiones*), involuntary bodily responses that only became true emotions with the assent of the reason.[120] This Stoic language came to infuse late ancient Christian discussion of sin, with temptation towards vice coming to stand for first movements and sinful behaviour for emotion.[121] 'Thoughts' (*cogitationes*) or 'prepassions' (*propassiones*) were not, in themselves, sinful: Richard Sorabji, summarizing the thought of Jerome, explains that 'the transition from prepassion … to emotion (*pathos*, *passio*) is marked by assent (*consentire*), will (*voluntas*), decision (*decernere*), and judgement (*iudicium*)'.[122] The same idea appeared in the thought of, amongst others, Gregory the Great. In a letter that Gregory sent to Augustine of Canterbury—reproduced by Bede in the *Historia ecclesiastica*—Gregory advised on culpability for bad thoughts as follows:

> *Cum enim malignus spiritus peccatum suggerit in mente, si nulla peccati delectatio sequatur, peccatum omnimodo perpetratum non est; cum uero delectare caro coeperit, tunc peccatum incipit nasci; si autem etiam ex deliberatione consentit, tunc peccatum cognoscitur perfici.*
>
> When an evil spirit suggests a sin to the mind, if no delight in the sin foillows then the sin is not committed in any form; but when the flesh

> begins to delight in it, then sin begins to arise. But if the mind deliberately consents, then the sin is seen to be complete.[123]

It was in this final step, at the point where the individual began to entertain the notion of the immoral thought, that sin lay. But although the ultimate decision lay with the individual soul, that soul was constantly being buffeted by both good and evil spiritual currents. The picture painted of human life by monastically influenced writers like Gregory and Cassian was of a barrage of temptation and coercion almost impossible for the mind to resist. Indeed, no human mind *could* resist the lure of sin on their own—as Augustine famously and forcefully argued, sin was impossible for humans to avoid without the intervention of God's grace. The issue of grace versus will led to one of the more tangled and combustible of late antique Christian theological debates, beginning with Augustine's attacks on 'Pelagianism'. Though the attitude of the Church towards this question was much less homogenous than some scholars have presented it,[124] all mainstream Christian writers agreed that no individual could rise above the inherent sinfulness of the human condition without the intervention of God. The human mind, said Gregory, 'indifferent and insensible in its pleasures, grows listless unless it is aroused by the inspiration of divine grace'.[125]

Generally, Bede was not as interested in the inner workings of the mind as he was in prescribing correct behaviour. Scott DeGregorio has commented that Bede, unlike his hero Gregory, rarely touched upon the inner life:

> Whereas Gregory sought both to encourage right behavior and to uncover its dark, mysterious roots in human consciousness, Bede by contrast was concerned almost entirely with the former. Indeed … he consequently tended to select passages from Gregory that enjoined actualizing faith in deeds, while neglecting almost entirely the pope's more introspective and mystical reflection.[126]

Nevertheless, Bede did not completely neglect the interior world of the human mind. Much of his understanding of the mind, and its thoughts and emotions, was coloured by the Christianized-Stoic ideas outlined above. Yet he was also aware that there were discrepancies between different Christian traditions and exercised care and shrewd judgement in his selection of which theories of mind to follow and which to discard. The vision of psychology and the human inclination towards sin that he presented in his writings was a complex response to Augustine, Gregory, Cassian and Jerome.

To start with, Bede rejected the rather simplistic dualism of Cassian, who had seen sin as the 'victory of foreign forces',[127] and instead embraced the rather more complex model of Augustine and Gregory, for whom the will itself was equally at fault. In language that crops up frequently in his writings, he exhorted his readers to avoid the twofold trap of bodily passion

and tempting thought: immorality, he wrote, lies 'in sins in the body and in wicked thoughts in the mind' (*peccatis in corpore et a prauis cogitationibus in mente*).[128] The truly holy are those who work to curb 'the lustful movements of their flesh or their soul' (*lasciui suae carnis siue animae motus*),[129] the 'irrational movements of the soul or the flesh' (*motus animae uel carnis irrationabiles*)[130] or the 'foolish movements of the mind or the flesh' (*motus etiam animi uel carnis ineptos*).[131] For this reason, the good Christian ought to ask God to help him curb 'wantonness' (*luxoria*) arising from two sources: 'from desire' (*ab affectu*) and 'from thought' (*a cogitatione*).[132] Though he used the same term for both, Bede clearly distinguished between *cogitationes* ('thoughts') as unwilled pre-passions and *cogitationes* as actively entertained sinful thoughts. We find him in a homily advising his audience on sinful thoughts in language strongly reminiscent of Gregory (ultimately derived from the *suggestio—delectatio—consentio* model of sin devised by Augustine):[133]

> *Sciendum autem quia triplex est modus cogitationum nequam; unus earum quae deliberatione et proposito peccandi mentem contaminant; alius earum quae delectatione quidem peccati mentem perturbant nec tamen hanc ad peccandi consensum pertrahunt; tertius earum quae naturali motu mentem percurrentes non tamen hanc ad patranda uitia inliciunt quam a bonis quae cogitare debuit impediunt ueluti est cum fantasmata rerum quae aliquando superuacue gesta uel dicta nouimus ad memoriam reducimus quarum crebra retractatio quasi inportuna muscarum inprobitas oculos cordis circumuolare ac spiritalem eius aciem inquietare magis quam excaecare consueuit*.[134]
>
> We should be aware that there are three degrees of evil thoughts: one, of those which contaminate the mind by the deliberate choice and purpose of sinning; another, of those which confuse the mind by the delight of sin, yet do not allure it to consent to sin; the third, of those which move across the mind in a natural way yet do not entice it to give in to vices, though they keep it from the good things it ought to reflect on. This occurs for example when we bring back to mind the phantasms of things which we know were once idly done or spoken. A frequent recalling of these matters, like the troubling annoyance of flies, tends to swirl about the eyes of the heart; it does more to disturb its spiritual vision than to blind it.

The thoughts in Bede's third category—those which 'move across the mind in a natural way yet do not entice it to give in to vices'—were not sinful in and of themselves. Indeed, these kinds of unwilled thoughts materialized even in the minds of the most pious. It was only once the will had assented to these thoughts that the individual had committed a sin. Actively entertained thoughts, however, could count as sins just as much as actions could, as demonstrated by a story of a vision recorded by Bede in the *Historia*

ecclesiastica that had a moral message to impart: 'that we might remember that our thoughts and deeds are not scattered to the wind but are all kept to be examined by the great Judge'.[135]

The role of demons in the stirring up of human passions loomed large in Bede's view of human sinfulness.[136] Bede's exegetical and homiletic writings are full of warnings against the temptations of evil spirits that will lead a soul into sin. Again and again, he warned that the trickery of demons leads people to turn away from spiritual concerns, to be taken in by heresies and false prophets, and to fall into vice and become embroiled in the concerns of this world.[137] In his letter to Ecgberht, Bede emphasized the importance in his eyes of preaching to the populace and teaching them the particulars of their faith, so that they could defend themselves 'against the assaults of unclean spirits'.[138] Satan and his demons were at all times seeking to instigate sin via the 'irrational movements' (*motus irrationabiles*) of the soul or the flesh.[139] 'The savage deceiver', wrote Bede, 'will subject to his rule the foolish movements of mind or body, for instance, anger, ambition, gluttony, lust and such others, which must be curbed and restrained by the teaching of wise men'.[140] Demons, he explained, have two avenues by which they might attempt to lead humans to sin: 'on their own account, by covertly applying persuasion' (*per se ipsos latenter suadendo*), or 'by applying seduction by means of men whom they have already deceived' (*per deceptos homines seducendo primo*).[141] At the same time, demons were not capable of *controlling* the human mind or of making it act in any way that it did not consent to. Bede argued against those who wrongheadedly believe that evil thoughts are put in to our minds by the devil and not 'born from our own will' (*ex propria nasci uoluntate*)—'the devil', as he explained, 'can be a helper and an inciter of evil thoughts, but he cannot be their author'.[142] Instead, the devil

> *semper in insidiis positus, leuem cogitationum nostrarum scintillam suis fontibus inflammarit, non debemus opinari eum cordis quoque occulta rimari sed ex corporibus habitu et gestibus aestimare quid uersemus intrinsecus. Verbi gratia: si pulchram mulierem nos crebro uiderit inspicere intelligit cor amoris iaculum uulneratum.*
>
> always lies in wait and kindles small sparks in our thoughts with his own tinder. We should not imagine that he searches the secrets of the heart as well, but from the gestures and demeanour of our body, he guesses what is going on inside of us, for example, if he sees us repeatedly looking at a lovely woman; then he understands that our heart has been wounded by the dart of love.[143]

When Scripture speaks of someone being tempted in their heart by Satan, therefore, one should not understand that Satan enters the soul of the individual but that he draws the soul towards sinning by means of 'thoughts' (*cogitationes*) and 'temptations towards vice' (*incentiua uitiorum*).[144] Bede's

point that the devil could not penetrate the heart (in other words, the soul) was an important one: evil spirits were unable to enter the heart's citadel, only God could do that.[145]

The melodramatic language with which Bede described mankind's mental life echoes that of his predecessors, especially Gregory. He presented an image of the Christian soul as a beleaguered redoubt, beset at all times by a tempestuous and disruptive world. Again and again he warned of the ceaseless danger of temptations 'stirred up against us now by demons, now by men, now by our own desire for them' (*nunc a daemonibus nunc ab hominibus nunc a nostra ipsorum concupiscentia contra nos excitata*).[146] The faithful are in constant danger from the 'assaults' (*inruptiones*),[147] 'turbulent blasts' (*flatus turbulenti*)[148] and 'unremitting ambushes' (*continuae insidiae*) of the unclean spirits.[149] Satan's followers are 'besieging' (*obsidens*) the faithful.[150] Even the most pious are not impervious to this constant beleaguerment by improper thoughts. The exemplar of living with the body's passions was, for Bede as it had been for Gregory, Job: Job was subject to the bodily passions (*suggestio*) just as everyone was, but simply did not consent (*consentire*) or even delight (*delectari*) in sin.[151] Indeed, as Bede stressed, for most people perfection in the present life was an ideal to constantly strive for, not a condition which, once achieved, was perpetual: 'the contemplation of the heavenly life', he advised, 'can be tasted scarcely for a moment by saints dwelling in the flesh; for the corruptible body weighs down the soul, and the earthly habitation presses down the mind that is thinking about many things'.[152] The avoidance of sin is only achieved through God's help; criminal behaviour, on the other hand, comes about through human failings. As he explained in his commentary on Genesis:

> *Filiae uero beati loth carnales etiam sublimium uirorum cogitationes exprimunt, quarum incuria ita nonnumquam eis suberigitur, ut etiam ex pio corde uerbum siue factum minus probum quasi filii nequam concipiantur … quia saepe contingit ut qui per inlustrationem gratiae celestis alia uitiorum temptamenta deuicerant, denuo per inertiam propriae infirmitatis aliis eneruiter succumbant.*
>
> The daughters of the blessed Lot represent the carnal thoughts of even the noblest men, the disregard of which is sometimes snatched from them, so that even from a pious heart a wicked word and a wicked deed, bad sons as it were, are conceived … This is because the fact that we are saved from dangers is certainly owing to God's illuminating grace, while the fact that we fall back into our vices is owing to our own blindness and frailty.[153]

It is impossible, in other words, to achieve the 'angelic life' (*uita angelica*) or the 'heavenly life' (*uita caelestis*)[154] while living in the present world (although we may be able to glimpse it occasionally) due to the corruptible and disordered nature of temporal existence and the postlapsarian human body.

The tumultuous lot of humankind was often contrasted with the life enjoyed by the angels in heaven. The angels, as Bede explained in his commentary on the Tabernacle, 'perfectly adhere to the vision of their Maker, free from every impure impulse of thought'.[155] Through God's grace they 'have received the power to will no evil'.[156] Humans, having fallen from perfect knowledge, could not say the same. Only God, 'by inspiring internally' (*interius inspirando*), could bring the human being to true knowledge.[157] The human mind could thus never be truly at rest in this life, though some moments of rest through grace were allowed to the most holy:

> *Adiuramus et nos dominum nostrum orantes ut nobis cum maneat donec perfectionem sanctae requiei per spiritus sancti gratiam consequamur qua requiescamus et a seruilibus actibus, id est peccatis in corpore et a prauis cogitationibus in mente.*
>
> We also entreat our Lord to stay with us until we come to the perfection of holy rest by the grace of the Holy Spirit. By that grace we rest both from servile deeds—namely, the sins of the body—and from perverse thoughts of the mind.[158]

As scholars have pointed out, Bede's vision of grace is of a cooperative relationship with God; though he stressed the fact that humans can act well only with God's help, he also believed that 'victory comes also through individuals' faith and prayers' and thus 'preserves a role for human volition'.[159] Stephanie Clark has drawn attention to the reciprocal cycle, derived from the logic of gift-giving, that lay at the heart of Bede's vision of the relationship between humans and God.[160] Prayer, for Bede, was 'petition and thanks for favours granted', a complementary relationship rather than a mechanistic one.[161] And what was entailed by 'prayer' for Bede? It should be a constant feature of one's conscious mind, an uninterrupted turning towards God:

> *Neque aliter apostolicum illud praeceptum quo ait, sine intermissione orate, perficere ualemus nisi sic omnes actus sermones cogitatus ipsa etiam silentia nostra ita domino donante dirigamus ut singula haec cum timoris illius respectu temperentur ut cuncta per- petuae nostrae saluti proficua reddantur.*
>
> We are not otherwise capable of carrying out the command of the Apostle wherein he says, "Pray without ceasing", unless we direct all our actions, utterances, thoughts, [and] even our silences, by God's gift, in such a way that each of these may be carried out with regard to fear of him so that all of them may be rendered profitable for our eternal salvation.[162]

For Bede, it was an almost-unremarkable fact of life that, through one's thoughts and actions here on earth, one might enter into a reciprocal

relationship with God's grace and, rising above the confused turbulence of the present life, come in a very real sense to touch the divine. This contact with the divine was actualized through the Holy Spirit. The notion of the Spirit as a kind of possessing power that brought man into contact with God is a characteristic feature of the New Testament.[163] It is particularly strong in Luke–Acts, where the author often deployed the image of Jesus and the apostles being 'filled' (*replere*, and once *implere*, in the Vulgate) with the Holy Spirit, which then inspired and guided their actions.[164] Being filled with the Spirit enabled humans to gain mystical understanding, to speak in tongues, to perform miracles and to prophesy (Luke 1:15, 41, 67; Acts 2:4, 4:8, 31, 9:17, 31, 13:9, 52. Cf. Eph 5:18). In his epistles, St. Paul spoke of the Spirit as something that was constantly present in all believers (1 Thess 1:5–6; Rom 5:5; Gal 4:6), filling them with joy, interceding with God (Rom 8:26–7), revealing deeper understanding (1 Cor 2:10–16) and giving them faith (1 Cor 12:9). At the same time, the Spirit also lent miraculous powers such as healing, speaking in tongues, prophecy and discernment of spirits (1 Cor 12:8–10). As illustrated by these two differing characterizations, the residence of the Spirit in Christian bodies was conceptualized in two contradictory ways in the early Church. On the one hand, it was understood that the Spirit was a constant presence in every Christian; on the other, it was imagined as only occasionally possessing individuals for specific purposes. According to scholars of the early Church, this seeming logical incongruity does not seem to have caused any problems for early Christians.[165] We find the same dual role in Bede's writings. It is clear that he understood the Spirit to play an important role in the mechanics of miracle-working. The Spirit was particularly responsible for granting mystical insight and understanding, powers which, for Bede, were a foretaste of the powers of the age to come (see Chapter 8). The Spirit, for instance, filled Elizabeth (Luke 1:41–2) and, as Bede put it, 'in a marvellous manner that Spirit, when he filled her, instructed her in the knowledge of present things along with past and future things'.[166] Luke wrote his Gospel, said Bede, 'with the Holy Spirit directing his pen' (*spiritu sancto calamum regente*), as did all the writers of Scripture.[167] The Spirit plays a similar role in the *Historia ecclesiastica* as in the Acts of the Apostles: guiding the faithful, lending prophetic insight and allowing for the performance of miracles. It is the *spiritus prophetiae* that allowed Æthelthryth to foretell the plague which would take her own life[168] and Aidan both to foretell a storm at sea and to miraculously calm the tempest.[169] Overall, though, Bede's preference was to emphasize the frequent presence of the Spirit in all the members of the Church. Most importantly for Bede's view of human psychology, it was the presence of the Spirit that allowed the soul to be moved by God's grace.[170] And 'undoubtedly', as Bede advised in a homily, 'whatever good we truly have, whatever we do well, this we receive from the lavishness of that same Spirit'.[171]

This vision of divine control married to a moral system that emphasized personal responsibility seems—to modern eyes at least—to harbour an inherent paradox. To wit: if God controls all, how can humans be said to have

free will? To have truly and freely made a choice, an individual must have had the option of doing other than they did. How can anyone be said to have chosen freely if their actions were *controlled* in some sense by God? Questions about free will and predestination represent an inextinguishable source of debate and dissension in the ancient and medieval Church,[172] and the difference between orthodoxy and heresy often rested on extremely subtle arguments about the nature of grace and causation (the ninth-century heretic, Gottschalk, could call on the writings of respected Church Fathers, including Bede, to back up his case).[173] The case is not helped by the tendency among historians until recently to label as 'Pelagian' or 'semi-Pelagian' some writers whose views on predestination did not accord with Augustine's, terms with little or no historical validity in most cases.[174] To what extent do human actions rely on grace and to what extent on merit? The question was never answered satisfactorily in this period. The 'Second Council of Orange' in 529 declared 'that grace is not preceded by merit', a rejection of any notion that humans could do good through their own volition alone and without the aid of grace. But the Council glossed over many of the more difficult aspects of Augustine's model of grace, and there was never a single orthodox line on this issue, except insofar as a 'Pelagian' emphasis on will alone was to be roundly rejected. Theologians usually tried, as Gregory the Great did, to tread a middle ground, endorsing the idea that 'grace is not preceded by merit' while also seeking to emphasize a *cooperation* between grace and human will.[175] It is not correct then to present Augustine's views as a standard of orthodoxy and any deviating views as heterodox. Bede's own understanding is reflective of this disorderly inheritance. Pelagianism might seem a curiously live topic for Bede, writing three centuries after its namesake had been declared a heretic, but, as Dáibhí Ó Cróinín has recognized, the term 'Pelagianism' went hand-in-hand with quartodeciminism for Bede: those who believed that, in working out the date of Easter, the full moon might fall before the equinox were doing no less than asserting 'that it is possible to be saved without the prevenient grace of Christ'.[176] Bede reserved a particular acerbity for this idea and for all notions of human will that appeared to deny or minimize the role of grace:

> *Omnis quidem sapientia salutaris a domino postulanda est, quia sicut uir sapiens ait: Omnis sapientia a domino Deo est et cum illo fuit semper, neque aliquis per liberum arbitrium sine adiutorio gratiae diuinae, quamuis Pelagiani multum contendant, intellegere ac sapere ualet.*
>
> all saving wisdom, indeed, must be begged from the Lord, because as the wise man says, All wisdom is from the Lord God and was always with him (Sir 1:1), and no one is able to understand and be wise of his own free will without the help of divine grace, although the Pelagians argue a lot [about this].[177]

Yet in Bede's own writings there existed, as Aaron Kleist has noted, 'a tension between grace and merit',[178] a tension that was never resolved. He stated

that humans were unable to save themselves and that faith and good works became possible only through grace; yet he also spoke of faith and good works as originating in merit.[179] Like Gregory, he envisioned a cooperation between the will of individual humans and the providential governance of God—the two overlaid one another, with the result that there was no need to conceive either of a constraint on human free will *or* of a limitation on God's causal power.

In Bede, we also find the idea that one of the roles of the angels was to protect the Christian mind from demonic influence. In his commentary on Samuel, he referred to the 'troop of angels' (*agmen angelicorum*), 'by whose aid it is needful for us to be protected when we wrestle with the powers of the *aer*'.[180] 'It is no secret', he said in a homily, 'that angels are frequently present, invisibly, alongside the elect, so that they can defend them from the snares of the cunning enemy, and raise them up with the mighty grace of heavenly desire'.[181] The angels, he explained in his commentary on the Temple, rejoice over the elect already in heaven, and 'they never cease giving assistance to those chosen ones also whom they see still in exile on earth until they bring them too to their heavenly homeland'.[182] By what mechanism this aid is administered is not entirely clear—perhaps by emptying the immediate vicinity of evil spirits the angels facilitate the human being's ascent through grace.

Given all of this, then, what steps could one take to avoid the drag of bodily passion and demonic temptation? Bede taught that when we gird our mind in sobriety, as per Scripture (1 Pet 1:13), 'we may restrain both the flesh from lustful movements and the heart from enticing thoughts'.[183] But what did this mean in practical terms? Cassian and Gregory had taught that the mind must always be occupied by *something*—best, then, to keep it occupied through sacred study and prayer.[184] Bede's advice followed similar lines. 'There is no easier method', he wrote, 'by which we can curb the endless wandering of superfluous thoughts than for us to rehearse often and constantly bear in mind the memory of the Lord's blood'.[185] And elsewhere: 'because we cannot totally avoid idle thoughts, we should put them to flight, as far as we can, by stirring up good thoughts, and especially by frequent meditation on the Scriptures'.[186] In the *Vita s. Cuthberti*, Bede detailed the saint's construction of a special building in his hermitage on the island of Farne. The building's outside walls were higher than a man, and, by digging down into the rock, Cuthbert managed to make the inside of the building even deeper, 'to the extent that the holy inhabitant was able to look at nothing from his dwelling except the heavens, thus restraining wantonness of the eyes or the thoughts and lifting the full intention of his mind towards heavenly desires'.[187] The monastic and ascetic lifestyle followed by Bede's saints had a direct logical connection, therefore, with the way in which Bede envisioned the physics of the body and its relation to the cosmos. The intrinsic turmoil of the human mind could only be tamed (and then only temporarily) with recourse to prayer, contemplation and concentration on God.

Conclusion

At heart, Bede's vision of the self is of a twofold nature: *anima* married to *corpus*. But his understanding of human nature is not dualism in a Cartesian or even a Neoplatonic sense. Bede's soul is not the abstracted entity proposed by these philosophies, nor is its relationship to the body so distant. Instead, his writings present us with a vision of a gradated cosmos, in which the physical and the spiritual shade into one another. In Bede's anthropology, by the same token, the mind does not represent a discrete domain, detached from the body or from the cosmos. Instead, it is deeply connected with the wider physical and spiritual world around it. The malevolent interventions of invisible spirits or the unruly movements of one's own body might arouse passions or bad thoughts in the mind. At the same time, the grace of God provides the soul with a flickering connective tether to the higher world.

Unlike those covered by other chapters of this study, Bede's understanding of the soul was a relatively static subject area, at least on the face of it. Given the doctrinal dangers involved in over-enthusiastic speculation about such matters, it is no surprise that Bede hewed close when he could to traditional positions on the nature of the soul—he was especially orthodox when it came to ideas such as the soul leaving the body only at death and the culpability of the mind for sinfulness. Yet, as we have seen, some aspects of belief about the soul were not as sharply defined for Bede as we might, in hindsight, imagine. As I emphasized in Chapter 1, we must be mindful of the limits to Bede's reading—and his library, in fact, was low on the kinds of texts that might have inculcated a Platonic-leaning dualism in him. The understanding of the physics of the soul that he gleaned from his studies was thus a different beast than even that of Alcuin, who, only a generation later, was able to read Boethian and Neoplatonic texts unavailable to Bede.[188] Even though the soul was not a subject of explicit deliberation in Bede's writings, then, it would be a mistake to pass over the subject brusquely, and, as I hope this chapter has demonstrated, Bede's subtle and shaded understanding of the spiritual world is in fact one of the more singular aspects of his entire cosmology.

Notes

1 For instance: J.E. Annas, *Hellenistic Philosophy of Mind* (Berkeley, 1992); J. Bremmer, *The Early Greek Concept of the Soul* (Princeton, 1983); T.M. Robinson, *Plato's Psychology* (Toronto, 1995); R. Sorabji, 'Soul and Self in Ancient Philosophy'; R. Teske, 'Augustine's Theory of Soul', in E. Stump and N. Kretzmann (eds), *The Cambridge Companion to Augustine* (Cambridge, 2001), 116–23; G. O'Daly, *Augustine's Philosophy of Mind* (Berkeley, CA, 1987); J.M. Rist, *Augustine: Ancient Thought Baptized* (Cambridge, 1994), 92–147; P.S. MacDonald, *History of the Concept of Mind: Speculations about Soul, Mind and Spirit from Homer to Hume* (Aldershot, 2003), 143–60; L. Hölscher, *The Reality of the Mind: St Augustine's Philosophical Arguments for the Human Soul as Spiritual Substance*, 2nd ed. (Oxford, 2013), esp. 13–25.

2 A. Kenny, 'Body, Soul, and Intellect in Aquinas', in M.J.C. Crabbe (ed.), *From Soul to Self* (London, 1999), 33–48; A. Kenny, *Aquinas on Mind* (London, 1993); R. Pasnau, *Thomas Aquinas on Human Nature* (Cambridge, 2002), 'Human Nature' in A.S. McGrade (ed.), *The Cambridge Companion to Medieval Philosophy* (Cambridge, 2003), 208–30; R.C. Dales, *The Problem of the Rational Soul in the Thirteenth Century* (Leiden, 1995); H. Lagerlund (ed.), *Forming the Mind: Essays on the Internal Senses and the Mind/Body Problem from Avicenna to the Medical Enlightenment* (Dordrecht, 2007); M. Cameron (ed.), *Philosophy of Mind in the Early and High Middle Ages* (Abingdon, 2019).
3 See below, n33.
4 For instance, R. Sorabji, *Matter, Space and Motion: Theories in Antiquity and Their Sequel* (London, 1988).
5 P. Markie, 'Descartes's Concepts of Substance', in J. Cottingham (ed.), *Reason, Will and Sensation: Studies in Descartes's Metaphysics* (Oxford, 1994), 63–87; R.S. Woolhouse, *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth-Century Metaphysics* (London, 1993).
6 See especially G. Smith, 'Physics and Metaphysics', in S.F. Johnson (ed.), *The Oxford Handbook of Late Antiquity* (Oxford, 2012), 513–61.
7 Sorabji, *The Philosophy of the Commentators*, II, 269–73.
8 Hahm, *Stoic Cosmology*, 3–28; G. Lloyd, 'Pneuma between Body and Soul', *The Journal of the Royal Anthropological Institute* 13 (2007), 135–46; M.D. Altschule, 'The Pneuma Concept of the Soul', *Journal of the History of the Behavioral Sciences* 1 (1965), 314–20.
9 R. Renehan, 'On the Greek Origins of the Concepts of Incorporeality and Immateriality', *Greek, Roman and Byzantine Studies* 21 (2004), 105–38; Smith, 'Physics and Metaphysics', 528–30.
10 S. O'Neill, ''You have been in Afghanistan, I Perceive': Demonic Agency in Augustine', *Dionysius* 29 (2011), 9–28, at 13.
11 Tertullian, *De carne Christi* 11.4 (ed. Kroymann, CCSL 2, 895): 'Omne, quod est, corpus est sui generis'. P. Kitzler, 'Tertullian's Concept of the Soul and His Corporealistic Ontology', in J. Lagouanère and S. Fialon (eds), *Tertullianus Afer: Tertullien et la littérature chrétienne d'Afrique* (Turnhout, 2015), 43–62.
12 Paulsen, 'Early Christian Belief in a Corporeal Deity: Origen and Augustine as Reluctant Witnesses'; G. Stroumsa, 'The Incorporeality of God: Context and Implications of Origen's Position', *Religion* 13 (1983), 345–58.
13 For the (in)corporeality of souls, see P.L. Gavrilyuk, 'The Incorporeality of the Soul in Patristic Thought', in R.K. Loftin and J.R. Farris (eds), *Christian Physicalism? Philosophical Theological Criticisms* (Lanham, MD, 2018), 1–26. For angels, see below 130–1.
14 Augustine's arguments against corporealism have attracted considerable comment. See, for instance, François Masai, 'Les conversions de Saint Augustin et les débuts du spiritualisme en Occident', *Le Moyen Âge* 67 (1961): 1–40; R.J. Teske, 'Spirituality: A Key Concept in Augustine's Thought', *Revista Portuguesa de Filosofia* 64 (2008), 53–71; O'Daly, *Augustine's Philosophy of Mind*, 21–31; P. King, 'Body and Soul', in J. Marenbon (ed.), *The Oxford Handbook of Medieval Philosophy* (Oxford, 2012), 505–24, at 506–8.
15 Augustine, *De quantitate animae* 31.64 (ed. Hörmann, CSEL 89, 212).
16 Smith, 'Physics and Metaphysics', 528–30. The word *immaterialis*, meanwhile, was extremely rare in Latin before the high middle ages (Smith, 'Physics and Metaphysics', 548 n83)
17 Gavrilyuk, 'The Incorporeality of the Soul', 9.
18 G. Peers, *Subtle Bodies: Representing Angels in Byzantium* (Berkeley, CA, 2001), 109: 'Angels occupy the middle area—as a kind of third body—in nature somewhere between God and humanity, but with a nature not fully determinable'.

19 Peers, *Subtle Bodies*, 108–9; Colish, *The Stoic Tradition*, II, 122
20 Basil, *De spiritu sancto* 23 (ed. Pruche, SC 17, 444; trans. Schaff, 35).
21 Cassian, *Conlationes* 7.13 (ed. Petschenig, 192–3; trans. Gibson, 367): 'habent enim secundum se corpus quo subsistunt, licet multo tenuius quam nostra sunt corpora'.
22 Gregory, *Moralia* 2.3.3 (ed. Adriaen, CCSL 143A, 61): 'angelorum uero spiritus loco quidem circumscripti sunt'.
23 *DOC* 2.15 (ed. Díaz y Díáz, 96).
24 *Aggressus* 10 (ed. Munzi, *Multiplex latinitas*, 77). For discussion, see L. Lockett, *Anglo-Saxon Psychologies in the Vernacular and Latin Traditions* (Toronto, 2011), 228–60. Grammarians had long been concerned with defining the noun (*nomen*) according to classical philosophical definitions of body. The Christianized form of this grammatical tradition began to add angels and souls to the mix and to consider how such beings might fit into the classical classification of bodies. By the eighth century, according to Lockett, Insular grammarians had brought a Gregorian relativism to bear on such questions.
25 J. Marenbon, 'Abelard on Angels', in I. Iribarren and M. Lenz (eds), *Angels in Medieval Philosophical Inquiry: Their Function and Significance* (Aldershot, 2008), 63–71. Note that Abelard did not apply this argument to the human soul.
26 See E. Grant, *Much Ado about Nothing: Theories of Space and Vacuum from the Middle Ages to the Scientific Revolution* (Cambridge, 1981), 130; Grant, 'The Concept of *Ubi* in Medieval and Renaissance Discussions of Place', *Manuscripta* 20 (1976), 71–80; Kochiras, 'Spiritual Presence and Dimensional Space beyond the Cosmos'.
27 Smith, 'Physics and Metaphysics', 540–1:

> Augustine clearly found the flexible features of fine-material constitution appealing from a number of perspectives, along with the fundamental notion of a hierarchy of material existence from visible and thick to very thin. In fact, he very nearly tried to have it both ways, to locate the soul in a hierarchy like this (at the top of the thin list, naturally) while maintaining its difference in kind from all bodies.

Note also the comments of F. Van Fleteren, 'Angels', in *Augustine through the Ages*, 20–2, at 21–2.
28 Augustine, *De cura pro mortuis* 16.20 (ed. Zycha, CSEL 41, 653–4).
29 Smith, 'Physics and Metaphysics', 540–1.
30 Augustine, *DGAL* 3.4 (ed. Zycha, CSEL 28.1, 67); cf. Augustine, *DGAL* 7.19 (ed. Zycha, CSEL 28.1, 215–16).
31 Smith, 'Physics and Metaphysics', 541–3. Cf. Smith, 540: 'it is difficult to find any ancient thinkers apart from Plotinus and Augustine who … directly confronted the problems we generally take for granted as the necessary result of making an uncompromising ontological distinction between body and mind'.
32 On Claudianus, see Brittain, 'No Place for a Platonist Soul in Fifth-Century Gaul? The Case of Mamertus Claudianus', in R.W. Mathisen and D. Shanzer (eds), *Society and Culture in Late Antique Gaul: Revisiting the Sources* (Ashgate, 2001), 239–62.
33 P. Clemoes, '*Mens absentia cogitans* in The Seafarer and The Wanderer', in D.A. Pearsall and R.A. Waldron (eds), *Medieval Literature and Civilization: Studies in Memory of G. N. Garmonsway* (London, 1969), 62–77; M. Godden, 'Anglo-Saxons on the Mind', in M. Lapidge and H. Gneuss (eds), *Learning and Literature in Anglo-Saxon England* (Cambridge 1985), 271–98; Lockett, *Anglo-Saxon Psychologies*; M. Matto, 'Vernacular Traditions: Exploring Anglo-Saxon Mentalities', *Journal of English and Germanic Philology* 115 (2016), 95–113.

34 Clemoes, 'Mens absentia'; Godden 'Mind'; Lockett, *Anglo-Saxon Psychologies*. For a useful overview and critique, see M. Matto, 'Vernacular Traditions'.
35 The history of the idea of the soul is a large and sprawling topic. Some works of relevance are M.E. Isaacs, *The Concept of Spirit: A Study of Pneuma in Hellenistic Judaism and its Bearing on the New Testament* (London, 1976); Verbeke, *L'évolution de la doctrine*; J. Haldane, 'Soul and Body', in R. Pasnau (ed.), *The Cambridge History of Medieval Philosophy* (Cambridge, 2009), 291–304; and the essays in J. Crabbe (ed.), *From Soul to Self* (London, 1999).
36 P.C. Miller, 'Shifting Selves in Late Antiquity', in D. Brakke, M.L. Satlow and S. Weitzman (eds), *Religion and the Self in Antiquity* (Bloomington, IN, 2005), 15–39; R. Sorabji, 'Soul and Self in Ancient Philosophy', in M.J.C. Crabbe (ed.), *From Soul to Self* (London, 1999), 8–32.
37 W. Gewehr, 'Zu den Begriffen anima und cor im frühmittelalterlichen Denken', *Zeitschrift für Religions- und Geistesgeschichte* 27 (1975), 40–55; E. De la Peza, 'El significado de "cor" en san Agustin', *Revue d'Études Augustiniennes et Patristiques* 7 (1961), 339–68.
38 For the later survival of the idea of the soul's preexistence, see L. Nauta, 'The Preexistence of the Soul in Medieval Thought', *Recherches de Théologie ancienne et médiévale* 63 (1996), 93–135.
39 On ancient and medieval views of the body, see P. Brown, *The Body and Society. Men, Women, and Sexual Renunciation in Early Christianity* (New York, 1988); C.W. Bynum, *The Resurrection of the Body in Western Christianity, 200–336* (New York, 1995).
40 Augustine, *DCD* 13.24 (ed. Dombart and Kalb, CCSL 48, 409).
41 *Breuiarium in Psalmos* 12 (PL 26, 0849A). On this theme in medieval literature more generally, see C.D. Wright, '*De plasmatione Adam*', in L. DiTommaso, M. Henze and W. Adler (eds), *The Embroidered Bible: Studies in Biblical Apocrypha and Pseudepigrapha in Honour of Michael E. Stone* (Leiden, 2018), 941–1003.
42 Avitus, *De spiritalis historiae gestis* 2.93–4 (ed. Peiper, MGH Auct. ant. 6.2, 214).
43 Augustine, *DCD* 22.24 (ed. Dombart and Kalb, CCSL 48, 848); cf. M.R. Miles, *Augustine on the Body* (Eugene, OR, 1979).
44 C. Straw, *Gregory the Great: Perfection in Imperfection* (Berkeley, 1988), 41–6.
45 On Alcuin's discussion of the soul, see Godden, 'Anglo-Saxons on the Mind'; P.E. Szarmach, 'Alfred, Alcuin and the Soul', in R. Boenig and K. Davis (eds), *Manuscript, Narrative, Lexicon: Essays on Literary and Cultural Transmission in Honor of Whitney F. Bolton* (Lewisburg, PA, 2000), 127–48.
46 Bede, *In Luc.* 4.12.23 (ed. Hurst, CCSL 120, 252): 'anima incorporea sit'; cf. Augustine, *De sermone Domini in monte* ii.XV.50 (ed. Mutzenbecher, p. 141).
47 Bede, *In Luc.* 1.3.38 (ed. Hurst, CCSL 120, 91): 'incorporea pars hominis'; cf. Augustine, *Quaestiones euangelorium* ii.VI.2 (ed. Mutzenbecher, p. 49).
48 See below 135–6.
49 Bede, *DNR*, ch. 2 (ed. Jones, p. 193); *IG* 1.2 (ed. Jones, CCSL 118A, 44).
50 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 45).
51 See above, 61 and 71.
52 D.N. Bell, 'The Tripartite Soul and the Image of God in the Latin Tradition', *Recherches de théologie ancienne et médiévale* 47 (1980), 16–52; V. Law, *Wisdom, Authority and Grammar in the Seventh Century: Decoding Virgilius Maro Grammaticus* (Cambridge, 1995), 60–6.
53 Bede, *EA* 1.1; 2.23 (ed. Gryson, CCSL 121A, 243; 419); cf. Primasius, *In Apocalypsin* 1.1 (ed. Adams, CCSL 92, 9).
54 Bede, *De tab.* 2.1778–9 (ed. Hurst, CCSL 119A, 87): 'interior homo noster ternario numero comprehenditur cum ex toto corde tota anima tota uirtute deum diligere iubemur'.

55 Bede, *In primam partem Samuhelis* 2.13 (ed. Hurst, CCSL 119, 111); cf. DeGregorio and Love, *Bede: On First Samuel*, 211 n437.
56 Bede, *In primam partem Samuhelis* 3.17 (ed. Hurst, CCSL 119, 151).
57 On the Platonic tradition of the three parts of the soul, see M. Woods, 'Plato's Division of the Soul', *Proceedings of the British Academy* 73 (1987), 23–48; M. Schiefsky, 'Galen and the Tripartite Soul', in R. Barney, T. Brennan and C. Brittain (eds), *Plato and the Divided Self* (Cambridge, 2012), 331–49.
58 For this term, see Lockett, *Anglo-Saxon Psychologies*, 17 and passim; Bremmer, *Early Greek Concept of the Soul*.
59 Bede, *DTR* 35 (ed. Jones, CCSL 123B, 391–5).
60 Bede was probably familiar with Cassius Felix's *De medicina* and the pseudo-Hippocratian *Ad Antiochum regem* (see. M.L. Cameron, 'The Sources of Medical knowledge in Anglo-Saxon England', *Anglo-Saxon England* 11 (1982), 135–55, at 146; Jones, *Bedae Opera de temporibus*, 365–6). Bede's main discussions of medical issues come in *DTR* 30 (ed. Jones, CCSL 123B, 372–4).
61 Bede, *DNR* 2 (ed. Jones, CCSL 123A, 193).
62 On the later debate about whether the body assimilated food, and Bede's place in it, see P.L. Reynolds, *Food and the Body: Some Peculiar Questions in High Medieval Theology* (Leiden, 1999), 7, 58–9, 146, 296–7.
63 Jerome, *In Matt*. 2.15 (ed. Hurst and Adriaen, CCSL 77, 131).
64 Bede, *In Marci* 2.7 (ed. Hurst, CCSL 120, 522).
65 Bede, *In Tob*. 6.5 (ed. Hurst, CCSL 119B, 9–10): 'ferunt enim quia calore ac uirtute iecoris occulta cibi excoquantur comesti et ad digestionem perueniant'. Cf. Isidore, *Etym*. 11, 1.125 (ed. Lindsay); Pseudo-Clement, *Recognitiones* 8.30 (ed. Rehm and Paschke, 236).
66 Bede, *In Marci* 2.7.20–1 (ed. Hurst, CCSL 120, 522): 'De corde, inquit, exeunt cogitationes malae. Ergo animae principale non iuxta platonem in cerebro sed iuxta christum in corde est'. Cf. Jerome, *In Matheum* 2 (ed. Hurst and Adriaen, CCSL 77, 131). On the classical roots of the debate over the heart or the brain as the seat of the soul, see J.L. Wright, 'Brain and Soul in Late Antiquity', PhD (Princeton, 2016); cf. J.T. McIlwain, 'Brain and Mind in Anglo-Saxon Medicine', *Viator* 37 (2006), 103–12.
67 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 45; trans. Kendall, 110). Bede derived this information from Augustine, *DGAL* 7.18 (ed. Zycha, CSEL 28.1, 215). He does not seem to have known much more than this about the classical image of the ventricles of the brain and their different functions (for the theory of ventricular localisation, see C.U.M. Smith, 'Beginnings: Ventricular Psychology', in C.U.M. Smith and H. Whitaker, *Brain, Mind and Consciousness in the History of Neuroscience* (New York, 2014), 1–19; Wright, 'Brain and Soul in Late Antiquity', passim.
68 Bede, *In Ez* 2.1610–11 (ed. Hurst, CCSL 119A, 328; trans. DeGregorio, 139): 'cogitationes … de occulta cordis radice uelut de internis cerebri sinibus oriuntur' (my emphasis).
69 Bede, *In cant*. 5.7.5 (ed. Hurst, CCSL 119B, 325); cf. Gregory the Great, *Homiliae in euangelia* 1.1.3 (ed. Etaix, CCSL 141, 7).
70 Godden, 'Anglo-Saxons on the Mind'. Godden does not discuss Bede in this essay, concentrating instead on Alcuin, Alfred and Aelfric.
71 L. Lockett, 'The Limited Role of the Brain in Mental and Emotional Activity According to Anglo-Saxon Medical Learning', in A. Jorgensen, F. McCormack and J. Wilcox, *Anglo-Saxon Emotions: Reading the Heart in Old English Language, Literature and Culture* (Farnham, 2015), 35–51.
72 For Augustine's understanding of the brain and soul relationship, see Wright, 'Brain and Soul', 190–5. As Wright has shown, Christians who accepted the idea that the brain governed the body were often able to reconcile this with a

non-localized understanding of the soul. Gregory of Nyssa, for instance, distinguished 'the intellectual governance of the mind from the corporeal governance of the brain … there is localisation of governing function, but not of mind itself' (Wright, 'Brain and Soul', 158–9). Recognition in Christian texts of the importance of the brain therefore does not necessarily entail that the author believed the soul to be localized in the brain.

73 Lockett, *Anglo-Saxon Psychologies*, 255–60.

74 Wright, 'Brain and Soul', 182–95.

75 As in Alban's 'constancy of heart' (*cordis constantia*): Bede, *HE* 1.7 (ed. Lapidge, SC 489, 136).

76 Bede, *Acta et passio beati Anastasii martyris* 12 (ed. Franklin, 397).

77 Bede, *In epistulas septem catholicas* 4.4 (ed. Hurst, CCSL 121, 316).

78 Bede, *Exp Act Ap* 1.18 (ed. Laistner, CCSL 121, 12).

79 Tertullian defined death as the moment the bond between soul and body was severed: Tertullian, *De anima* 27 (ed. Waszink, CCSL 2, 38).

80 Gregory, *Dialogi* 4.7 (ed. de Vogüé, SC 265, 40).

81 Augustine, *DGAL* 12.33 (ed. Zycha, CSEL 28.1, 428–30).

82 McCready, *Signs of Sanctity*, 130 n48; Colgrave and Mynors, *Bede*, 344 n2. Indeed, the topos preceded Christian literature A.Y. Collins, 'Ascents to Heaven in Antiquity: Toward a Typology', in E.F. Mason (ed.), *A Teacher for All Generations: Essays in Honor of James C. VanderKam* (Leiden, 2011), 553–72, at 571.

83 Bede, *VCP* 4, 34 (ed. Colgrave, 164–6, 260–4).

84 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 216).

85 Bede, *HE* 4.21 (ed. Lapidge, SC 490, 328).

86 Bede, *VCP* 28 (ed. Colgrave, 250): 'angelico ministerio pariter ad regnum coeleste translati'.

87 Tertullian, *De anima* 27 (ed. Waszink, CCSL 2, 38); Augustine, *DGAL* 12.1 (ed. Zycha, CSEL 28.1, 380).

88 As in the case of Gregory the Great, who related how the spirit of Benedict visited some of his monks in their dreams: Gregory, *Dialogi* 2.22 (ed. de Vogüé, SC 260, 204); for discussion see Dal Santo, *Debating the Saints' Cults in the Age of Gregory the Great* (Oxford, 2012), 67–70.

89 Bede, *HE* 3.19; 5.12 (ed. Lapidge, SC 490, 102–14; SC 491, 68–84).

90 As in P. Dinzelbacher, *Vision und Visionsliteratur im Mittelalter*, Monographien zur Geschichte des Mittelalters 23 (Stuttgart, 1981); E. Gardiner, *Medieval Visions of Heaven and Hell: A Sourcebook*, Garland Medieval Bibliographies 11 (New York, 1993); J. Le Goff, 'The Learned and Popular Dimensions of Journeys in the Otherworld in the Middle Ages', in S. Kaplan (ed.), *Understanding Popular Culture: Europe from the Middle Ages to the Nineteenth Century* (New York, 1984), 19–37; S. Rowley, 'The Role and Function of Otherworldly Visions in Bede's *Historia ecclesiastica gentis Anglorum*'; Lapidge, 'Visions', in M. Lapidge (ed.), *The Blackwell Encyclopedia of Anglo-Saxon England* (Oxford, 1999), 462–63.

91 Bremmer, *Rise and Fall*, 96.

92 Particularly in C. Zaleski, *Otherworld Journeys: Accounts of Near-Death Experiences in Medieval and Modern Times* (Oxford, 1987); Bremmer, *Rise and Fall*; Dinzelbacher, *Vision und Visionsliteratur*.

93 Keskiaho, *Dreams and Visions*, 65; cf. J. Keskiaho, 'Eighth-Century Anglo-Latin Ecclesiastical Attitudes to Dreams and Visions', *Ennen ja nyt* 4 (2004) <https://www.ennenjanyt.net/4-04/referee/keskiaho.pdf>.

94 For Augustine's theory of three kinds of vision, which established the 'rules' of visionary experience, see Moreira, 'Augustine's Three Visions and Three Heavens in some Early Medieval Florilegia', *Vivarium* 34 (1996), 1–14.; Keskiaho, *Dreams and Visions*, 137–216.

95 Gregory, *Dialogi* 4.37 (ed. de Vogüé, SC 265, 126–34); Gregory of Tours, *Historia Francorum* 7.1 (ed Krusch and Levison, MGH rerum Merovingicarum 1.1, 323–7); *Vita Martini* 7 (ed. Fontaine, SC 133, 268). All three authors also depicted *uisiones*, and these are clearly a different kind of event to the post-mortem soul-voyage: see, for instance, the man who 'by means of a vision in the night' (*nocturna uisione*) saw a crown made of white flowers descend onto his head: Gregory, *Dialogi* 4.49 (ed. de Vogüé, SC 265, 170); the *uisiones* of Guntram and Vulfolaic (both of which occurred during sleep) recounted elsewhere in Gregory's *Historiae*: *Historia Francorum* 8.5, 8.16 (ed Krusch and Levison, MGH rerum Merovingicarum 1.1, 374, 383); and the *uisio* that St. Martin experienced 'after he had surrendered himself to a deep sleep' (*cum se sopori dedisset*): *Vita Martini* 3 (ed. Fontaine, SC 133, 258). The emphasis on death is also found in an early Anglo-Saxon witness to this tradition: a letter of Bede's contemporary, Boniface, described a journey to the afterlife experienced by a man 'who recently died and came to life again' (*qui nuper mortuus est et revixit*): Boniface, *Ep.* 10 (ed. Tangl, MGH Epistolae Selectae 1, 8–15). This episode, though certainly drawing on the same well of tradition, seems to have arisen independent of Bede's narrative (Foxhall Forbes, 'Diuiduntur in quattuor', 665–6). It nevertheless demonstrates the existence of a rich and robust tradition of such literature and shows that the death of the protagonist was a central feature of stories of this type.

96 On the influential Augustinian interpretation of Paul's experience, see: C. Németh, 'Paulus Raptus to Raptus Pauli: Paul's Rapture (2 Cor 12:2–4) in the Pre-Scholastic and Scholastic Theologies', in S. Cartwright (ed.), *A Companion to St. Paul in the Middle Ages* (Leiden, 2013), 349–92; Keskiaho, *Dreams and Visions in the Early Middle Ages*, 137–216; K. Schlapbach, 'Intellectual vision in Augustine, De Genesi ad litteram 12, or: Seeing the hidden meaning of images', *Studia Patristica* 43 (2006), 239–44.

97 As in Cicero, *De re publica* 6.9–29 (ed. Ziegler, 126–36).

98 Gregory, *Dialogi* 4.37 (ed. de Vogüé, SC 265, 126).

99 I. Moreira, *Dreams, Visions, and Spiritual Authority in Merovingian Gaul* (Ithaca, NY, 2000), 142.

100 Scholars have identified a belief in the wandering external soul in Old English poetry (V. Salmon, '"The Wanderer", "The Seafarer" and the Old English Conception of the Soul', *Modern Language Review* 55 (1960), 1–10; N. Hultin, 'The External Soul in 'The Seafarer' and 'The Wanderer'') but it has been convincingly argued that this is a misreading: see A. Harbus, 'The Maritime Imagination and the Paradoxical Mind in Old English Poetry', *Anglo-Saxon England* 39 (2010), 21–42, at 36–7; Clemoes, '*Mens absentia cogitans*'. One early medieval text in which soul travel during sleep is presented with no apparent scepticism is Paul the Deacon, *Historia Langobardorum* 3.34 (ed. Waitz, SS rer. Germ. 48, 139), cf. Moreira, *Dreams, Visions*, 142 n24. Some have hypothesized an oral tradition of such stories in medieval Europe (Bremmer, *The Early Greek Concept of the Soul*, 132–5).

101 Bede, *HE* 3.19 (ed. Lapidge, SC 490, 104): 'ubi correptus infirmitate … raptus est e corpore, et a uespera usque ad galli cantum corpore exutus, angelicorum agminum et aspectus intueri et laudes beatas meruit audire'.

102 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 68): 'quidam aliquandiu mortuus ad uitam resurrexit corporis'.

103 For discussion of the topography of Dryhthelm's voyage, see below Chapter 7, 189–201.

104 Bede, *HE* 3.19 (ed. Lapidge, SC 490, 102).

105 For the way in which Bede understood this revived body to work, see below Chapter 8, 229–30.

106 C.W. Bynum, *The Resurrection of the Body in Western Christianity, 200–336* (New York, 1995); E.A. Castelli, 'Mortifying the Body, Curing the Soul: Beyond Ascetic Dualism in The Life of Saint Syncletica', *Differences* 4 (1992). 134–53.

107 S. Lee, 'Occasionalism', *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.) <https://plato.stanford.edu/archives/win2016/entries/occasionalism/>; and see the essays on the soul and causation in S. Nadler (ed.), *The Cambridge Companion to Malebranche* (Cambridge, 2000).
108 R. Sorabji, *Emotion and Peace of Mind: From Stoic Agitation to Christian Temptation* (Oxford, 2000), esp. 343–417; S. Knuuttila, *Emotions in Ancient and Medieval Philosophy* (Oxford, 2004); T. Dixon, *From Passions to Emotions: The Creation of a Secular Psychological Category* (Cambridge, 2003); R.A. Layton, 'From "Holy Passion" to Sinful Emotion: Jerome and the Doctrine of *Propassio*', in P.M. Blowers, A.R. Christman, D.G. Hunter and R.D. Young (eds), *In Dominico Eloquio: In Lordly Eloquence: Essays on Patristic Exegesis in Honor of Robert Louis Wilken* (Cambridge, 2002), 280–93; B. Rosenwein, *Emotional Communities in the Early Middle Ages* (Ithaca, 2006).
109 C. Taylor, *Sources of the Self: The Making of the Modern Identity* (Cambridge, 1989), 111.
110 See the references in 108 above, plus Brakke, *Demons and the Making of the Monk*, passim.
111 Brakke, *Demons*, 39; Straw, *Perfection in Imperfection*, 44,
112 Augustine, *DCD* 14.3 (ed. Dombart and Kalb, CCSL 48, 8).
113 Gregory, *Moralia* 31.45 (ed. Adriaen, CCSL 143B, 1611). On the seven deadly sins, see M.W. Bloomfield, *The Seven Deadly Sins: An Introduction to the History of a Religious Concept, with Special Reference to Medieval English Literature* (East Lansing, MI, 1952); C. Straw, 'Gregory, Cassian, and the Cardinal Vices', in R. Newhauser (ed.), *In the Garden of Evil: The Vices and Culture in the Middle Ages* (Toronto, 2005), 35–58.
114 Straw, 'Gregory, Cassian, and the Cardinal Vices'.
115 C. Straw, 'Gregory's Moral Theology: Divine Providence and Human Responsibility', in B. Neil and M.J. Dal Santo (eds), *A Companion to Gregory the Great* (Leiden, 2013), 177–204.
116 On this theme, see P. Brown, 'The Rise and Function of the Holy Man in Late Antiquity', *The Journal of Roman Studies* 61 (1971), 80–101; P. Brown, 'Sorcery, Demons and the Rise of Christianity From Late Antiquity to the Middle Ages', in M. Douglas (ed.), *Witchcraft Confessions and Accusations* (New York, 1970), 17–45; Brown, *The Making of Late Antiquity* (Cambridge, MA, 1978), 20–3; I. Graiver, 'The Mind Besieged: Demonically-Induced Obsession in Monastic Psychology in Late Antiquity', in A. Klambauer (ed.), *Muses, Mystics, Madness: The Diagnosis and Celebration of Mental Illness* (Oxford, 2016), 23–33; R. Valantasis, 'Daemons and the Perfecting of the Monk's Body: Monastic Anthropology, Daemonology and Asceticism', *Semeia* 58 (1992), 47–79; C. Leyser, 'Angels, Monks, and Demons in the Early Medieval West', in R. Gameson and H. Leyser (eds), *Belief and Culture in the Middle Ages* (Oxford, 2001), 9–22; and especially the essays of David Brakke, collected in *Demons and the Making of the Monk: Spiritual Combat in Early Christianity*.
117 See Brakke, *Demons and the Making of the Monk*; G.A. Smith, 'How Thin is a Demon?', *Journal of Early Christian Studies* 16 (2008), 479–512.
118 Cassian, *Conlationes* 7.15 (ed. Petschenig, CSEL 13, 194–5). In the same manner, angels were sometimes understood to offer beneficial advice and counsel to the soul (though, as we shall see, not necessarily as often as the demons). Possession was an entirely different matter (see discussion in next chapter).
119 Gregory, *Moralia* 19.1 (ed. Adriaen, CCSL 143A, 956): 'maligni spiritus humanas mentes obsidentes, dum cogitationes noxias ingerunt, uerbum uitae a memoria euellunt'.
120 On Stoic theories of emotion, see M.R. Graver, *Stoicism and Emotion* (London, 2007); Sorabji, *Emotion and Peace of Mind*.

121 Sorabji, *Emotion and Peace of Mind*; Layton, 'From "Holy Passion" to Sinful Emotion'; Knuuttila, *Emotions in Ancient and Medieval Philosophy*; Dixon, *From Passions to Emotions*.
122 Sorabji, *Emotion and Peace of Mind*, 352–3.
123 Bede, *HE* 1.27 (ed. Lapidge, SC 489, 238; trans. Colgrave and Mynors, 101). cf. Knuuttila, 173–4.
124 See below, 125 n174.
125 Gregory, Moralia 27.16 (ed. Adriaen, CCSL 143B, 1355): 'nisi diuinae gratiae aspiratione pulsetur, in suis delectationibus frigida insensibilisque torpescat'.
126 S. DeGregorio, 'The Venerable Bede on Prayer and Contemplation', *Traditio* 54 (1999), 1–39, at 14.
127 Straw, 'Gregory, Cassian, and the Cardinal Vices', 45.
128 Bede, *In Tob*. 8.23 (ed. Hurst, CCSL 119B, 13); cf. Bede, *IG* 4.17 (ed. Jones, CCSL 118A, 209).
129 Bede, *In Ez*. 3.627–8 (ed. Hurst, CCSL 119A, 354–5).
130 Bede, *In primam partem Samuhelis* 2.14 (ed. Hurst, CCSL 119, 123).
131 Bede, *In primam partem Samuhelis* 2.8 (ed. Hurst, CCSL 119, 75).
132 Bede, *IESC* 2.1.13 (ed. Hurst, CCSL 121, 230).
133 On this idea, see Knuuttila, *Emotions in Ancient and Medieval Philosophy*, 169–70. Bede made a more explicit reference to Augustine's wording, also used by Gregory, in *IESC* 1.1.15 (ed. Hurst, CCSL 121, 188): 'temptation acts in three ways: suggestion, delight and consent' (*tribus modis temptatio agitur, suggestione, delectatione, consensu*); cf. Gregory, *Homiliae in Evangelia* 1.16 (ed. Etaix, CCSL 141, 110).
134 Bede, *Hom*. 2.12 (ed. Hurst, CCSL 122; trans. Hurst, 115).
135 Bede, *HE* 5.13 (ed. Lapidge, 88; trans. Colgrave and Mynors, 503): 'ut meminerimus facta et cogitationes nostras non in uentum diffluere, sed ad examen summi iudicis cuncta seruari'.
136 S. Clark, *Compelling God: Theories of Prayer in Anglo-Saxon England* (Toronto, 2018), 168–9.
137 For instance, Bede, *In Ez*. 1.42–8; 3.2025–32 (ed. Hurst, CCSL 119A, 242; 390); *In Regum librum xxx quaestiones* 30.36–42 (ed. Hurst, CCSL 119, 321); *IESC* 1.3.15; 4.4.1 (ed. Hurst, CCSL 121, 209; 310); *De man.* (PL 94, 702); *IG* 3.11 (ed. Jones, CCSL 118A, 159); *In cantica canticorum* 3.4.8 (ed. Hurst, CCSL 119B, 256); Bede*, Homiliae* 1.22 (ed. Hurst, CCSL 122, 158).
138 Bede, *Epistola ad Ecgbertum* 5 (ed. Grocock and Wood, 132): 'contra immundorum spirituum certamina'.
139 Bede, *In primam partem Samuhelis* 2.14 (ed. Hurst, CCSL 119, 123).
140 Bede, *In primam partem Samuhelis* 2.8 (ed. Hurst, CCSL 119, 75; trans. DeGregorio and Love, 130): 'motus etiam animi uel carnis ineptos uerbi gratia iram aemulationem gulam luxoriam et cetera talia quae sapientium necesse est disciplina coerceantur et refrenentur … officia suo potius iuri saeuus fraudator mancipabit'.
141 Bede, *In primam partem Samuhelis* 2.13 (ed. Hurst, CCSL 119, 104; trans. DeGregorio and Love, 130, modified).
142 Bede, *In Marci euangelium expositio* 2.7.20–1 (ed. Hurst, CCSL 120, 522) verbatim from Jerome, *In Matt*. 2.15.19 (ed. Hurst and Adriaen, CCSL 77, 132; trans. Scheck, 181): 'Diabolus adiutor esse et incentor malarum cogitationum potest auctor non potest'.
143 Bede, *In Marc*. 2.7. 20–1 (ed. Hurst, CCSL 120, 522–3); Jerome, *In Matt*. 2.15.19 (ed. Hurst and Adriaen, CCSL 77, 132; trans. Scheck, 181–2).
144 Bede, *Expositio actuum apostolorum* 5.3 (ed. Laistner, CCSL 121, 29).
145 Caciola, *Discerning Spirits*, 191–4; B. Newman, 'Possessed by the Spirit: Devout Women, Demoniacs, and the Apostolic Life in the Thirteenth Century', *Speculum* 73 (1998), 733–70, at 738 n20. See further below, Chapter 5.

146 Bede, *In Sam*. 2.15 (ed. Hurst, CCSL 119, 127).
147 Bede, *In cant*. 3.4 (ed. Hurst, CCSL 119B, 263).
148 Bede, *De tab*. 2.1008–9 (ed. Hurst, CCSL 119A, 67).
149 Bede, *Ep. ad Ecgbertum* 15 (ed. Grocock and Wood, 152).
150 Bede, *In Sam*. 2.13 (ed. Hurst, CCSL 119, 110).
151 Bede, *IESC* 1.1.15 (ed. Hurst, CCSL 121, 188–9); Rosenwein, *Emotional Communities*, 82–3.
152 Bede, *In Sam*. 1.7 (ed. Hurst, CCSL 119, 59): 'caelestis uitae contemplatio degentibus in carne sanctis uix ad momentum potest delibari. corpus enim quod corrumpitur adgrauat animam, et deprimit terrena inhabitatio sensum multa cogitantem'.
153 Bede, *IG* 4.19 (ed. Jones, CCSL 118A, 230; trans. Kendall, 308–9).
154 On these terms, see A. Zumkeller, *Augustine's Ideal of the Religious Life*, trans. E. Colledge (New York, 1986), 120–2; R. Sowerby, *Angels in Early Medieval England* (Oxford, 2016), 60–7.
155 Bede, *De tab*. 1.527–9 (ed. Hurst, CCSL 119A, 18): 'perfecte ab omni impulsu impurae cogitationis alieni uisioni sui conditoris adhaerent'.
156 In the Platonic-Christian schema, knowledge *is* goodness. The free will of the angels does not come into question—once one has been given full access to divine knowledge, one does not wish to sin.
157 Bede, *Hom*. 1.22 (ed. Hurst, CCSL 122, 158). Clark, *Compelling God*, 168.
158 Bede, *In Tob*. (ed. Hurst, CCSL 119B, 13; trans. Holder, 71).
159 Kleist, *Striving with Grace*, 74.
160 Clark, *Compelling God*, 109–73.
161 Clark, *Compelling God*, 153.
162 Bede, *Hom*. 2.22 (ed. Hurst, CCSL 122, 344–5; trans. Martin and Hurst, 223).
163 On the development of ideas about the Holy Spirit, see R. Bultmann, *Theology of the New Testament*, 2 vols. (New York, 1951), I, 153–64; D.E. Aune, *Prophecy in Early Christianity and the Ancient Mediterranean World* (Grand Rapids, MI, 1983); D.E. Aune, 'Charismatic Exegesis in Early Judaism and Early Christianity', in J.H. Charlesworth and C.A. Evans (eds), *The Pseudepigrapha and Early Biblical Interpretation* (Sheffield, 1993), 126–50; D.E. Aune, 'The Presence of God in the Community: The Eucharist in its Early Christian Cultic Context', *Scottish Journal of Theology* 29 (1976), 451–9; G.D. Fee, *God's Empowering Presence: The Holy Spirit in the Letters of Paul* (Peabody, MA, 1994).
164 J.B. Shelton, *Mighty in Word and Deed: The Role of the Holy Spirit in Luke-Acts* (Peabody, MA, 1991), 74–82.
165 Bultmann, *Theology*, I, 153–64; Aune, *Prophecy in Early Christianity*, 200–1.
166 Bede, *Homiliae* 1.4 (ed. Hurst, CCSL 122, 24; trans. Martin and Hurst, 35): 'Mirumque in modum idem spiritus eam cum repleuit praesentium simul praeteritorum et futurorum scientia instruxit'.
167 Bede, *Exp act*. praef. (ed. Laistner, CCSL 121, 4).
168 Bede, *HE* 4.17 (ed. Lapidge, SC 490, 294).
169 Bede, *HE* 3.15 (ed. Lapidge, SC 490, 90).
170 Bede, *Hom*. 2.16 (ed. Hurst, CCSL 122, 290–1).
171 Bede, *Hom*. 2.14 (ed. Hurst, CCSL 122, 279; trans. Martin and Hurst, 132–3): 'nimirum quicquid boni ueraciter habemus quicquid bene agimus hoc eodem spiritu largiente percipimus'.
172 T.A. Smith, De gratia*: Faustus of Riez's Treatise on Grace and its Place in the History of Theology* (South Bend, IN, 1990); D. Ogliari, Gratia Et Certamen*: The Relationship Between Grace and Free Will in the Discussion of Augustine with the So-called Semipelagians* (Leuven, 2003); A.J. Kleist, *Striving with Grace: Views of Free Will in Anglo-Saxon England* (Toronto, 2008); A.Y. Hwang, B.J. Martz and A. Casiday (eds), *Grace for Grace: The Debates after Augustine and Pelagius* (Washington DC, 2014).

173 Gottschalk of Orbais, *Responsa de diuersis* (ed. Lambot, 152).

174 On criticisms of the notion that Pelagianism and semi-Pelagianism are valid categories for judging patristic and early Insular beliefs, see Hwang, Martz and Casiday, *Grace for Grace*; A. Bonner, *The Myth of Pelagianism* (Oxford, 2018); G. Bonner, 'The Pelagian Controversy in Britain and Ireland', *Peritia* 16 (2002), 144–55; and the reviews of M.W. Herren and S.A. Brown, *Christ in Celtic Christianity: Britain and Ireland from the Fifth to the Tenth Century*, Studies in Celtic History 20 (Woodbridge, 2002) by Gilbert Márkus (*Innes Review* 56, 165–213) and Gerald Bonner (*Peritia* 16, 510–13). For discussion of Augustine's ideas about free will and predestination, see M. Edwards, 'Willed Causes and Causal Willing in Augustine', in A. Marmodoro and B.D. Prince, *Causation and Creation in Late Antiquity* (Cambridge, 2015), 237–52; Stump, 'Augustine on free will'.

175 Straw, *Perfection in Imperfection*, 140.

176 Bede, *HE* 5.21 (ed. Lapidge, SC 491, 152): 'sine praeueniente gratia Christi se saluari posse'. D. Ó Cróinín, '"New Heresy for Old": Pelagianism in Ireland and the Papal Letter of 640', *Speculum* 60 (1985), 505–16, at 515–16.

177 Bede, *IESC* 1.1 (ed. Hurst, CCSL 121; trans. Hurst, 9). On Bede's views on heresy, see A.G. Holder, 'Hunting Snakes in the Grass: Bede as Heresiologist' in E. Mullins and D. Scully (eds), *Listen, O Isles, unto me: Studies in Medieval Word and Image in Honour of Jennifer O'Reilly* (Cork, 2011), 105–14.

178 Kleist, *Striving with Grace*, 82.

179 Kleist, *Striving with Grace*, 68–82.

180 Bede, *In Sam*. 2 (ed. Hurst, CCSL 119, 126; trans. DeGregorio and Love, 245–6): 'quorum nos necesse est contra potestates aerias dimicantes protegamur auxilio'.

181 Bede, *Hom*. 2.10 (ed. Hurst, CCSL 122, 248–9; trans. Martin and Hurst, 91): 'nec latet angelos crebro electis inuisibili adesse praesentia ut eos uel ab hostis callidi defendant insidiis uel maiori caelestis desiderii gratia sustollant'.

182 Bede, *De Templo* 1.1384–6 (ed. Hurst, CCSL 119A, 181; trans. Connolly, 50): 'eis quoque quos in terris adhuc peregrinari conspiciunt electis opem ferre non desinant donec et illos ad caelestem patriam introducant'.

183 Bede, *De tab*. 2.148–9 (ed. Hurst, CCSL 119A, 45; trans. Holder, 49, modified) 'et carnem a lasciuis motibus et cor ab illecebrosis refrenemus cogitationibus'.

184 C. Leyser, *Authority and Asceticism from Augustine to Gregory the Great* (Oxford, 2000), 52; Straw, *Perfection in Imperfection*, 107.

185 Bede, *In Cant*. 2.4 (ed. Hurst, CCSL 119B, 247; trans. from De Gregorio, 'Affective Spirituality', 132): 'uagationem cogitationum superfluarum inextinguibilem non alio facilius ordine quam memoria saepe dicti ac semper recensendi dominici sanguinis cohibemus'.

186 Bede, *Hom*. 2.12 (ed. Hurst, CCSL 122, 266; trans. Martin and Hurst, 116): 'Quia superuacuis cogitationibus ad integrum carere non ualemus has in quantum possumus inmissione bonarum cogitationum et maxime frequenti scripturarum meditatione fugemus'.

187 Bede, *VCP* 17 (ed. Colgrave, 216): 'quatinus ad cohibendam oculorum siue cogitationum lasciuiam, ad erigendam in superna desideria totam mentis intentionem, pius incola nil de sua mansione praeter coelum posset intueri'.

188 See above 7.

5 Aetherial angels and aerial demons

Early medieval Christians inhabited a world teeming with spiritual bodies, some benevolent, some malign. According to the hagiographers, one might stumble across a demon lurking at the bottom of a milk pail or sitting on a lettuce leaf.[1] As the seventh-century Ionan poem, *Altus Prosator*, put it, 'the region of the *aer* is choked by a wild mass of [Satan's] treacherous attendants'.[2] The angels of God were no less numerous. Hilary, the fourth-century bishop of Poitiers, had spoken of how 'all of this [space], which is thought empty, is filled with the angels of God—there is nowhere they do not inhabit as they go about their divine ministry',[3] while Adomnán of Iona reported that at the death of St. Columba, 'all the region of the *aer*, up as far as the *aether* of heaven, [was] lit up by the brightness of those innumerable angels'.[4] Bede, too, believed the world to be filled with demonic and angelic spirits—this notion was, in fact, a central part of his understanding of the cosmos and is thus deserving of our attention here. There has been a tendency in scholarship to skip over any detailed analysis of this spiritual world, to read early medieval beliefs according to the more familiar paradigms of patristic or later medieval religious thought. Yet, as Richard Sowerby has recently demonstrated, medieval ideas about angels—and, by the same token, demons—do not represent an unchanging or monolithic tradition.[5] Quite the opposite: the early middle ages saw a wide diversity of beliefs about these spiritual beings. As of yet, no study has provided an in-depth analysis of Bede's angelological or demonological understanding in its own right.[6] Bede's views in this regard are substantially different to the beliefs of later writers such as Aelfric and Byrhtferth; perhaps more surprisingly, they are also quite distinct from the beliefs recorded in the surviving glosses from the seventh-century Canterbury school of Theodore and Hadrian. They are therefore worthy of separate consideration.

My approach in this chapter has been informed by the scholarship of Gregory A. Smith, Seamus O'Neill and others, who have argued for a new appreciation of the tangibility of angels and demons in late antique literature.[7] While there exists a significant body of literature devoted to the role of demons in the spiritual life of early monks, much of this has concentrated on the demons' psychological import rather than their physical attributes.

This scholarly interest in the demon as an extension of the monastic psyche has yielded important and illuminating results.[8] Demons and their attacks were a way for late antique monks to allegorize psychological processes—they represent the reification of the internal conflicts of the human mind (see Chapter 4). At the same time, it is important to remember that, to those monks, the demons were very real. As Smith points out, the recent emphasis on psychological readings of such demon narratives can lead scholars 'to look past the physical reality of the demons themselves'.[9] Yet 'being invisible', as he notes elsewhere, is 'not the same as being a metaphor'.[10] The spiritual being inhabited the same universe as every other created thing and had to be explained according to the same rules. This chapter, then, will consider how the intangible and subtle bodies of good and evil spirits worked according to the principles and axioms of Bede's cosmos: it will explore the (meta)physics of angels and demons.

This subject has, from the earliest Christian centuries, often served as a vehicle for discussion about wider philosophical issues—angels and demons have served as something to think with, a hook on which to hang discussion of physics, metaphysics, theology and science. Most famously, the question of angels' bodies, and their relation to space and place, became an important point of discussion among the Scholastic theologians of the later middle ages (a practice that would come to be satirized as an obsession with the question of how many angels 'booted and spur'd may dance on a needle's point at once').[11] Angels and demons also had a role in early modern philosophical and scientific thought, where they were approached according to the rules of the 'new science' of the age.[12] Long before that, in late ancient and early medieval philosophy, similar strands of enquiry were pursued and the mechanics of spiritual beings explained according to Neoplatonic or Stoic cosmological principles.[13] As far as I am aware, Bede's modest but creative contribution to this angelological and demonological tradition has not been commented upon—even though, as we shall see, his views on the nature of the bodies of angels would have important consequences for later medieval thought.

The roles of angels and demons

The specific understanding that we find in Bede's writings of what a demon or an angel *was*, or what role it played in the world, was the product of several centuries of Christian exegetical and theological speculation.[14] During this time the references of Scripture to malevolent or beneficent invisible beings were filtered through the lens of classical philosophical learning and sharpened by centuries of debate over such topics as the nature of Jesus and the origin of evil. Some things were widely agreed upon: demons had once been angels but, after rebelling under their leader Satan, had fallen from God[15]; the gods worshipped by pagans were in fact demons[16]; and angels were the messengers of God, communicating God's messages to his chosen

people, protecting the people of Israel and serving as guardians or companions to individual Christians.[17]

It was widely assumed that the angels were present during the liturgy. Among patristic and early medieval writers it is clear that there was an expectation that choirs of angels were present during the sacrament of the Eucharist, during the singing of psalms, at the graves of the dead, and around the individual Christian as they prayed.[18] It is unsurprising, therefore, to find Bede advocating the same kinds of ideas:

> *Maxime … angelici nobis spiritus adesse credendi sunt cum diuinis specialiter mancipamur obsequiis, id est cum ecclesiam ingressi uel lectionibus sacris aurem accommodamus uel psalmodiae operam damus uel orationi incumbimus uel etiam missarum sollemnia celebramus.*
>
> The angelic spirits ought to be supposed especially present with us whenever we specifically give ourselves over to divine services; that is, whenever we enter a church and either direct our hearing to the sacred readings or participate in the singing of the psalms or apply ourselves to prayer or indeed celebrate the ceremonies of the mass.[19]

He was particularly certain that the angels were present during the Eucharist:

> *Nec dubitare licet ubi corporis et sanguinis dominici mysteria geruntur supernorum ciuium adesse conuentus qui monumentum quo corpus ipsum uenerabile positum fuerat et unde resurgendo abscesserat tam sedulis seruant excubiis.*
>
> nor is it permitted to doubt that, whenever the mysteries of the body and blood of the Lord are celebrated, there is present a gathering of those heavenly citizens who stood guard with attentive watch at the tomb in which the venerable body [of Christ] had been placed (John 20:12) and from which he departed after rising again.[20]

Angels also served to carry out God's wishes and to distribute punishments and rewards to humankind: 'as Jerome says', wrote Bede, 'the function of angels is two-fold: there are some who distribute rewards to the good, and others who preside over specific torments'.[21] Gregory's *Dialogi* and the *uitae* of Martin promulgated the idea that angelic visitations were a core feature of the saintly life. In Bede's hagiography, angels appear as guides, as messengers from God, as chastising figures or as helpers.[22] It was a defining feature of the very holy that they would be visited frequently by angels: to have regular conversations with angels, as Cuthbert did, was to have reached the heights of sanctity.[23] For Bede the homilist, the angels were the exemplars to which good Christians should look in their quest to live a spiritual life. The image did not originate with Bede but the *uita angelica* was a particular theme of his writings, held up as the standard that mankind should attempt to emulate.[24] He seems to have been a unique voice in his milieu in calling

for this monastic emulation of the angelic life; the same emphasis is missing from the writings of his contemporaries and successors.[25] In fact, Bede was of the opinion that the elect would fill out the number of angels at the end of time, a common opinion amongst his sources, as we shall see.

Demons, meanwhile, played a central role in monastic literature and rhetoric: the influential early *uitae* of the saints presented a picture of a desert teeming with malevolent spirits whose constant attacks tested the mettle of the holy men who had retired there.[26] They were therefore particularly associated in Insular texts with wilderness and *desertum*.[27] In Bede's *uitae* of Cuthbert, we find described the desolate island of Farne, 'frequented by evil spirits' which are driven away by the coming of St. Cuthbert.[28] The 'assaults of unclean spirits' (*immundorum spirituum certamina*) were a danger to the general populace too, not just desert-dwelling hermits like Cuthbert, as Bede warned in a letter to Ecgberht,[29] and the demons' role in tempting humans to sin was a strong undercurrent in Bede's writings, as we have seen.[30] Demonic possession—as opposed to temptation—was a distinct but equally widespread aspect of early medieval thought.[31] As a corollary, exorcism took an important role in Christian belief.[32] Christ had conferred on his disciples 'the power over unclean spirits that they might cast them out' (Matt 10:1; cf. Acts. 1:11–16). By Bede's day, exorcism had taken on a ritual and formulaic role, associated with baptism and with set rites involving oil, water, laying on of hands, the sign of the cross, prayers and the *exsufflatio* (a ritual involving breathing on the catechumen to exorcize the devil and clear the way for the Holy Spirit).[33] For Bede, these rituals were powerful anti-demonic tools. He noted that Christian teachers ought to drive out 'every unclean spirit' (*omnis spiritus immundus*) from the hearts of their listeners through blowing on them (*exsufflando*) and catechizing them.[34] When John of Beverley found out that Herebald had been imperfectly baptized, he proceeded to catechize him correctly and to blow on his face (*exsufflare in faciem*), presumably to drive out evil spirits.[35] Baptism, for Bede, saves the person 'from demonic slavery' (*a seruitute daemonica*)[36]; the waters of baptism, he said, expel the demon.[37] In his letter to Ecgberht, Bede spoke of the efficacy of the sign of the cross in warding off the attacks of demons.[38] Nevertheless, in most cases of exorcism recorded by Bede in his narrative texts, it was the personal piety of the holy man, and not rituals, that was successful in driving away demons.[39]

It was widely believed that when the soul left the body at the moment of death it immediately became the object of a struggle between angels and demons.[40] Gregory's *Dialogi* played an important role in cementing the idea that angels routinely appeared at the death of saints, whether to compete with devils for the soul,[41] ascend with the soul to heaven[42] or simply give honour by their presence.[43] Demons might also appear to attempt to drag souls to hell: Bede's contemporary Boniface recorded a vision in which a monk witnessed crowds of evil spirits and choirs of angels vying over the souls of the recently deceased.[44] Bede's views were in line with these ideas.

As he noted in *De tabernaculo*, one of the responsibilities of the angels was 'to bring to the Lord in heaven the spirits of the faithful' (*adferre domino in caelos spiritus fidelium*).[45] In Bede's hagiographies and histories, particularly holy individuals were depicted being escorted to heaven by a caravan of angels. Often this procession was something witnessed in a vision—but Bede was equally certain that it took place even in cases where no visionary witness was present.[46] Only in the case of Christians were the dead provided with such an escort, however; Richard Sowerby has shown that, for Bede, angelic assistance to heaven was an honour reserved for the elect.[47] And while angels might be there to meet you upon your demise, hordes of demons might also appear to drag your soul to hell.[48] On the other hand, the death of a particularly holy individual saw no such struggle: in the *Historia abbatum*, Bede reported that the ascent of Benedict Biscop's soul from his body to heaven was 'neither obstructed nor delayed to any extent by unclean spirits' (*neque ab immundis spiritibus aliquatenus impediendo uel retardando*).[49]

The (meta)physics of angels and demons

How did the angels and the demons fit into the kind of cosmological model outlined by Bede in *De natura rerum*? The Church Fathers had found it quite easy to slot these spirits into the cosmography inherited from classical philosophy. The angels, like a number of pre-Christian Roman equivalents,[50] belonged to the upper region of the universe, in the more perfect and rarified celestial sphere. In Christian circles there were a variety of ways of conceiving of the bodies of the angels: for those more inclined to thinking of angels corporeally, they could be thought of as possessing bodies formed from the Aristotelian aether; to more incorporealist thinkers, they were something entirely spiritual. The relative level of spatial circumscription of the angels was brought out, as we have seen, by theologians seeking to differentiate the angels from God—and it became something of a convention to compare angelic circumscription to God's omnipresence. Thus, we find the author of *De ordine creaturarum* explaining that an angel, unlike God, cannot be everywhere at once.[51] As celestial beings, the angels were able to act in ways that far surpassed the abilities of humankind, drawing on superhuman levels of speed and perception. Depictions of winged angels, though they were common, did not reflect how the angelic body was actually understood to be, but, as Bede pointed out in *De tabernaculo*, signifies 'that the angels have their dwelling place on high and are able to hasten everywhere as if with nimble flight; nor do they suffer any delay, but rather appear immediately wherever they wish'.[52] The fact that angels appeared in the Bible in the form of men did not interfere with this understanding of the angels' nature: Augustine had explained that angels were able to assume bodily form if needed, though he had also admitted that he did not know whether they formed bodies 'from the inferior, more corporeal elements' (*ex inferioribus*

elementis corpulentioribus), which they then wore and manipulated like clothing, or whether they *transformed* their own bodies into the appropriate form.[53] In any event, the fact that angels often appeared in physical, bodily form was understood as a method of making communication with humans possible and not as representative of their true form. Though Augustine professed not to know the composition of the bodies assumed by angels, the most common claim among theologians was that they took on bodies made of air.[54]

Demonic bodies, meanwhile, were of a different sort. Neoplatonists had taught that the bodies of the pre-Christian equivalent—the *daimones*—were made of air and wind and associated them with the equivalent area of the cosmos, the *aer*,[55] a characterization that dovetailed nicely with the kind of language used in Scripture. In his Epistle to the Ephesians, St. Paul placed the Christian struggle against the demons centre-stage when he exhorted the faithful: 'our wrestling is not against flesh and blood; but against principalities (*principes*) and powers (*potestates*), against the rulers of the world of this darkness, against the spirits of wickedness (*spiritualia nequitiae*) in the skies (*caelestia*)' (Eph 6:12). Elsewhere in the same letter, Paul referred to Satan as 'the prince of the power of this air' (*princeps potestatis aeris huius*; Eph 2:2). According to Sylvain J.G. Sanchez, Hilary of Poitiers was the first to combine these two passages and to speak of demons as 'the powers of this *aer*' (*potestates aeris huius*), a reading that brought Scripture in line with the Neoplatonic image of the nature of demons.[56] This terminology was repeated by Augustine and the author of *De ordine creaturarum* amongst others, and thus made its way to Bede.[57] The fact that the evil angels were thought to have been thrown down by God after their rebellion lent itself to the idea that demons possessed aerial bodies, inferior in composition to the aetherial bodies of the angels. It became a commonplace, then, that the demons' fall had been a literal one, involving a transit from the upper regions of the cosmos to the turbulent *aer* and a concomitant physical transformation: Isidore, for instance, wrote that demons had once possessed 'celestial bodies' (*caelestia corpora*) but that with their fall 'they were transformed into an aerial nature and were not allowed to possess the purer space of the *aer* but that gloomy space, which is like a prison for them until the time of judgement'.[58] Satan, said the author of *De ordine creaturarum*, 'was cast out with his companions from the highest serenity of his Paradise and assigned to the gloomy space of this *aer*' (*cum suis de summa sui paradisi serenitate deiectus caliginosum aeris huius locum sortitus est*).[59] Demons then were associated with the *aer* in two respects—it was both their natural home and the fundamental component of their constitution. This aerial nature also allowed Christians to explain the demons' powers and attributes in a way that made clear that demons were not divine. Augustine, for instance, sought, in the words of one recent scholar, 'to portray demons as a "natural phenomenon", in the same way we would talk about the climate or germs'.[60] The demons' aerial nature allows them to surpass humans in terms of knowledge, said

Augustine, 'as the perception of the aerial body easily surpasses the perception of earthly bodies'.[61] It also allows demons to move at great speed compared to humans and gives them a keener sensitivity, even allowing them to cause epidemics and taint the air so that it becomes a carrier of disease.[62] But demons, despite possessing powers which at first seem incredible, are not gods. They are simply possessed of more advanced bodies than humans (in the same way that some animals are more advanced in some ways than humans).[63] Demons ultimately are bound by space and by time—they are not transcendent like God and cannot see the future. They can simply influence the world in ways surpassing humans.

In Bede's writings, we find an exceptionally clear demonstration of how these aetherial and aerial beings might operate. Bede's angels were created on the first day of creation, along with the heaven, the earth, air, water and light.[64] The highest sphere of the cosmos, the *caelum superius*, as he wrote in *De natura rerum*, 'houses the angelic powers'.[65] Or, as he put it in *De temporum ratione*, the Spirit of God, before forming 'this visible heaven' (that is, the *mundus*), formed first the invisible, higher heaven 'in order to make the upper regions into a home for the angels, and the lower a home for men'.[66] In his commentary on Genesis, he clarified that the angels, along with the upper heaven itself, were created at once in the simultaneous creation.[67] As the higher heaven is eternal and completely removed from the temporal world, it followed that angels are of the same nature and Bede followed Augustine in assigning an unchanging and eternal moral fixity to the angels: incorruptible and immortal, they know God and are incapable of falling away from him.[68] He was unaware of, or unconvinced by, the tradition espoused by some that the angels struggled to return to God just as humans did.[69] Despite their eternal nature, however, angels are delimited and circumscribed by space in a way that God is not.[70]

Demons, meanwhile, were indelibly associated in Bede's mind with both the element of air and the region of the cosmos that corresponded to that element. As he said of the *aer*: 'it is where the aerial powers, which have been hurled down in torment from their celestial seat, await the Day of Judgement'.[71] In fact, such was the strength of the connection between demons and the *aer* in Bede's mind that he regularly interpreted any reference to 'air' in Scripture as a reference to evil spirits, an approach that often allowed him to build significantly on the material found in his exegetical source material. For instance, the Book of Revelation describes the 'Seventh Angel' pouring his vial on the air, a clear reference for Bede to the final vengeance that will be wreaked on the 'aerial powers' (*potestates aeriae*).[72] Other terms were also to be associated with the demons and their aerial home. A reference to 'earth', for instance, could also serve as a symbol of the fallen angels, in that it was the lower *aer*, the part associated with the earth, that the demons inhabited. God's condemnation of the serpent in the Book of Genesis was read by Bede in this way: when God declares to the hapless creature 'earth shall you eat all the days of your life' (Gen 3:14), Bede understood this

as a reference to the fact that Satan, 'having been expelled from spiritual regions' (*de spiritalibus expulsus*), is now 'tightly imprisoned in terrestrial places' (*artius terrenos includit*).[73] Another scriptural passage, 2 Peter 2:4, spoke of how the rebellious angels had been 'dragged down by the lines of the lower space' (*rudentibus inferni detracti*) into Tartarus (hell).[74] In Bede's reading of this passage, the 'lower space' refers to the lower half of the *aer*: 'by way of punishment', he explained, 'they [the fallen angels] have already received this lower world, that is, the lower dark *aer*, as a prison'.[75] Bede then explained how the word *infernus* ('lower space') could refer to two parts of the universe:

> *Quantum enim ad sublimitatem caeli iam huius aeris spatium dici infernus potest, sicut etiam quantum ad eiusdem aeris altitudinem terra quae inferius iacet infernus intellegi et profundus potest.*
>
> For, relative to the altitude of heaven the space of this *aer* can be referred to as "the lower space" (*infernus*); so too, relative to the altitude of that same *aer,* the earth which lies even further down can be understood as "the lower space" (*infernus*) and "the deep" (*profundus*).[76]

In other words, when Scripture referred to *infernus*, it could be taken as a reference either to the lower space of the *aer* or to the space below the earth (that is, hell). Bede also referred to the demons' abode in the *aer* in his short commentary, *De eo quod ait Isaias*. Isaiah 24:21–2 provided a seeming eschatological vision that needed some explaining:

> And it shall come to pass, that in that day the Lord shall visit upon the host of heaven on high, and upon the kings of the earth, on the earth. And they shall be gathered together as in the gathering of one bundle into the pit, and they shall be shut up there in prison: and after many days they shall be visited.

For Bede, it was clear that the phrase 'hosts of heaven' was a reference to 'the unclean spirits' (*spiritus immundi*), for two reasons. Firstly, demons originally inhabited heaven before they fell 'to the depths' (*ad ima*). Secondly, they now inhabit the *aer*, 'which in the Scriptures is often called "heaven"'.[77] Even allusions to birds were taken by Bede as references to demons, as they inhabit the *aer*.[78] Finally, the fact that Judas died from hanging was apposite (*dignus*) because he died in the middle of the air, 'almost as if to be united with the spirits of the *aer*' (*quasi aeriis tantummodo spiritibus sociandus*').[79]

Apart from the composition of their bodies, there existed further distinctions between angels and demons. The angels, said Bede, are continually in the presence of God: they 'rejoice always to behold … the immortal splendor of the Godhead'.[80] They are able to continue to behold God, 'even when they come from without (*foris*; i.e. from the *caelum superius* to the earth) by some means or other to serve us'.[81] They are able to do this because,

'although even the greatest angelic spirit is circumscribed, that spirit which is God is not circumscribed'.[82] In other words, God is everywhere, and this allows the angels—who are limited by place—to continue to be 'before him' (*ante ipsum*) even as they move about outside of heaven.[83] The demons, on the other hand, continue at all times to be tortured by the fires of hell, as Bede explained in his commentary on the Seven Catholic Epistles, even though they are often free to move about outside of hell:

> *ubicumque uel in aere uolitant uel in terris aut sub terris uagantur siue detinentur suarum semper se cum ferunt tormenta flammarum, instar febricitantis qui et si in lectis eburneis, si in locis ponatur apricis, feruorem tamen uel frigus insiti sibi languoris euitare non potest; sic ergo daemones et si in templis coluntur auratis, si per aera discurrunt, igne semper ardent gehennali*
>
> [they] always bring with them the torments of their flames wherever they go, whether they fly about in the *aer* or wander the earth or are imprisoned below the earth, like a fevered man who, even if he is placed in an ivory bed or in a sunny place, is still unable to avoid the heat or the cold of his innate condition; in this way then the demons, whether they are worshipped in gilded temples or rush around in the *aer*, always burn with the fires of hell.[84]

In *De natura rerum*, Bede alluded to the ability of angels to take on bodies in order to descend to earth: 'these [angels], in order to visit us, take aetherial bodies (*aetherea corpora*) for themselves so that they can be like human beings even in eating, and they lay aside the same when they return there'.[85] Demons, on the other hand, when they appear to humans, 'take for themselves aerial bodies' (*aeria sibi corpora sumunt*).[86] Bede made an important distinction, then, between the bodies taken on by angels and those assumed by demons. The angels' bodies are 'bodies of aether' (*corpora aetherea*); the demons' bodies are 'bodies of air' (*corpora aeria*). In other words, even when they take on corporeality, angelic bodies are more pure and subtle than demonic ones: the former are formed from the fine and fiery aether, the latter from the thick and murky air. This represents a break with tradition: Gregory and Isidore had claimed that angels assume bodies of air not of aether when they visit humankind. The reasons for Bede's modification are unclear, but it is likely that he derived the notion from Augustine, who, though he had professed not to know what kinds of bodies angels took on, nevertheless seemed to lean towards the Neoplatonic distinction between bad spirits of air and good spirits of aether.[87] Bede may also have been thinking of the bodies that redeemed humans would wear after the eschaton, bodies that would be 'equal to the angels' according to Luke 20:36 and 'very light and aetherial' (*lucidissima atque aetherea*) according to Augustine.[88]

When they do visit humanity, the bodies that angels tend to take on are those of shining, white-clad and noble-looking men. Bede's saints were

visited by, variously, ‘a crowd of white-clad men’ (*albatorum caterua hominum*)[89]; ‘a horseman clothed in white robes and of honourable countenance’ (*eques albis indutus uestimentis et honorabilis uultu*)[90]; the Archangel Michael, ‘radiant in bright white dress’ (*candido praeclarus habitu*)[91]; a man ‘shining in appearance and bright of garment’ (*lucidus aspectu et clarus indumento*)[92]; ‘two most handsome youths’ (*duo pulcherrimi iuuenes*), who were ‘bright and clothed in white’ (*albati praeclari*)[93]; and an angel ‘shining with a brilliant light’ (*luce splendens corusca*).[94] Bede was less apt than his contemporaries to give details about the physical appearance of the demons,[95] but it is clear that he believed them to be ‘frightful’ (*horridus*) and of ‘dark appearance’ (*tenebrosa facies*).[96] There are obvious literary and generic reasons for portraying angels and demons in this manner, but Bede provided a cosmological rationale as well. In *De natura rerum*, he wrote: ‘when they [demons] appear to men they take for themselves aerial bodies which resemble their just deserts’.[97] There was a logic, therefore, to the ways in which both angels and demons appeared to humans—even though their true bodies were invisible and vaporous, they appeared in forms that corresponded to their moral alignment.

Aside from taking on bodies, both angels and demons could also manipulate the physical world in other ways. Bede described how Bishop Germanus encountered a storm while crossing the English Channel that had been whipped up by demons. The demons did their utmost to prevent Germanus’s boat completing its journey, exhibiting a complete control over the weather: ‘they stirred up storms, they replaced the daylight with a cloudy darkness’.[98] As they had often done in the literature of the Desert Fathers, they could also cause apparitions. They raised a phantom fire to distract Cuthbert’s congregation from his preaching.[99] Angels were also sometimes depicted by Bede manipulating the physical world. For instance, when Cuthbert was alone on his island retreat, large stones that could barely have been moved by four men were transported to the saint’s habitation ‘through the assistance of angelic aid’ (*angelico adiutus auxilio*).[100]

The capabilities of the angelic and demonic spirits were awesome and, to the untrained eye, inexplicable, but Bede maintained a clear logical understanding of their limitations as well as their power. Demons, for instance, could tempt the minds of humans and even possess their bodies. How exactly were they able to do these things? As Bede knew from his reading it was by virtue of their aerial nature. Augustine had been particularly keen to emphasize that this demonic ability to tempt and persuade humans was through corporeal means only, not spiritual.[101] Evil spirits, as he wrote in *De diuinatione daemonum*, ‘persuade through extraordinary and invisible means: penetrating, by virtue of the subtlety of their bodies, into the bodies of unsuspecting humans and confounding their thoughts, whether in wakefulness or sleep, by means of certain visions of the imagination’.[102] John Cassian, too, had argued that demons could not take over the mind: they could penetrate the physical members of the body, overwhelming them, but

they were unable to penetrate the 'substance of the soul itself' (*animae ipsisu substantia*)[103]—only God can penetrate the soul.[104] Because possession was a takeover of the body, demoniacs often did not remember what they had done or said while possessed.[105] Bede's demonology followed the lines laid out by Augustine and Cassian. He understood possession to be a complete takeover of the body; the possessed person did not know what the demon was saying through his or her mouth. Demoniacs, Bede explained, do not 'know what they are saying when a demon speaks in them'.[106] Nor do they have any memory of these words afterwards. He surmised, for instance, that the demoniac king, Saul, 'in the manner of those who are possessed' (*more energumenorum*), did and said many thing which 'he was neither able to intend beforehand or recall afterwards' (*nec praemeditari prius nec post reminisci ualuerit*).[107] This bodily takeover saw human victims exhibit a number of conventional symptoms. Scripture would have left Bede with some fixed ideas about the way in which demonic possession might manifest itself: epileptic attacks and foaming at the mouth (Mark 9:16–19; Luke 9:39), dumbness (Mark 9:16, 24), madness (Mark 5:3–4) or the victim's body becoming bowed (Luke 13:11). Bede portrayed demoniacs such as the reeve's wife who was afflicted by a demon 'so that she gnashed her teeth and uttered piteous cries, linking her arms and limbs about in agitation, and so inspiring no little horror in all who saw or heard her'[108] and the boy on Lindisfarne who was vexed 'by a most cruel demon, so that he had completely lost his reason, and cried out, howled and tried to tear in pieces with his teeth both his own limbs and whatever he could reach'.[109] The actual mechanics of possession he described in Augustinian terms: the way in which the devil was able to possess the serpent in Eden, for instance, was by 'mingling' (*miscere*) his own spirit with the *body* of the unfortunate creature.[110] And Bede, like his predecessors, emphasized the fact that demons, as relatively fine, aerial beings, could possess human bodies but could not exert any influence over the soul. The only entity who could penetrate such materials as souls was God himself. Bede, as noted in the previous chapter, characterized the devil as a 'helper' (*adiutor*) and 'inciter' (*incentor*) of evil thoughts, but not their 'author' (*auctor*)[111]—Satan could suggest but could not actually penetrate the mind. In his commentary on Acts, Bede expanded on the theme: 'no created thing (*creatura*), according to the nature of its substance, is able to fill the soul and mind of a human'[112]—'the creating Trinity alone' (*creatrix sola trinitas*) is capable of doing so. There were rules to how spiritual beings could operate—and these rules were not abstract.

These 'rules' are evident too in the way in which Bede presented angelic visitations. There are a number of episodes in Bede's historico-hagiographical writings in which a saint is visited by an angel who has taken on the shape of a man (as opposed to visitations in visions or dreams). Two such stories concern us here: St. Cuthbert's meeting with a mysterious youth in Chapter 7 of the *Vita s. Cuthberti* (both prose and metrical versions) and King Edwin

of Northumbria's encounter with a prophesying stranger in Book 2, Chapter 12 of the *Historia ecclesiastica*. In both cases, Bede was retelling in his own words a story originally recounted in a different work.[113] In both cases too, Bede made the stranger's sudden disappearance a key proof of their angelic nature. King Edwin, wrote Bede, was once visited by a 'man of unknown face and habit' (*homo uultus habitusque incogniti*) who advised him that he would be returned to his throne and prepared him for the coming of the missionary Paulinus. The man then 'vanished suddenly' (*repente disparuit*)—something that happened, said Bede, 'in order that [Edwin] might understand that the one who had appeared to him had not been a man but a spirit'.[114] After all, as Bede had explained in *De natura rerum*, angels put on bodies of aether in order to appear to humankind—and when they are done with these bodies they 'shed them' (*eadem deponunt*) just as swiftly.[115] The disappearance into thin air of a noble-looking stranger thus had one inescapable conclusion: that the stranger had been an angel. A similar kind of logic is at play in the story of Cuthbert's angelic visitor. This time, the stranger did not disappear in front of the saint's eyes. Instead, Cuthbert left his visitor at a table while he went to fetch bread—when he returned the stranger had disappeared. Importantly, the fact that the ground was covered in freshly fallen snow meant there was no possibility of the stranger having left by human means—for Cuthbert could find no footprints. Bede closely followed the earlier version of the story in his verse and prose *uitae* of Cuthbert, but he expanded upon its terse narrative in order to make clear a number of points. The lack of footprints as proof of the stranger's angelic nature is present in all versions of the *uita*,[116] but it is most developed in Bede's prose version:

> Cuthbert searched for tracks showing the way in which [the stranger] might have gone, but he found none anywhere, even though the fresh snow covered the earth and would have readily revealed the path taken by any traveller and indicated the way in which they had gone.[117]

After returning to the kitchen and finding three loaves 'of unusual whiteness and excellence', Cuthbert put two and two together, realizing that the stranger had been an angel 'from aetherial halls' (*ab aula aetherea*) and that said angel, 'swift and winged' (*leuis aliger*), had already returned 'to the kindred stars' (*cognatis astris*).[118] The way in which Bede constructed Cuthbert's moment of realization is telling. The lack of footprints—implying a sudden lack of physical body—together with the appearance of the divine bread could seemingly only mean that the visitor had been an angel. One final element pointed towards the fact that the stranger was really an angel—the fact that he refused to eat any of the bread that he was offered—something which brings us to a topic that was something of a pet subject of Bede's: the impossibility of angels gaining sustenance from earthly food.

The mechanics of angelic digestion

In the prose *Vita s. Cuthberti*, Bede related the story of Cuthbert's angelic visitor as follows. One morning, Cuthbert came across a mysterious youth and, 'thinking him a human' (*quem hominem estimans*), welcomed him warmly.[119] Under the assumption that the youth was a traveller taking temporary refuge from the snowstorm, Cuthbert asked him 'to wait until the third hour of the day and be refreshed with food, lest, if he went away fasting, he might faint from hunger as well as from the wintry cold'.[120] Even though pressed by the saint, the stranger refused to stay to eat until Cuthbert implored him in God's name. When Cuthbert returned from the refectory, however, the youth had disappeared. The saint, unable to find any footprints in the freshly fallen snow, was 'stupified' (*stupefactus*) with amazement. He returned to the refectory, 'thinking the matter over to himself' (*secum querens de facto*), only to find waiting for him three loaves 'of unusual whiteness and excellence' (*insoliti candoris et gratiae*).[121] He then realized that his visitor had been an angel. With this realization, the guest's strange behaviour began to make sense to Cuthbert, who mused:

> *Cerno quod angelus Dei erat quem suscepi, pascere non pasci ueniens … Nec mirum quod epulas in terris sumere respuerit humanas, qui aeterno uitae pane fruitur in coelis.*
>
> I perceive that he whom I received was an angel of God, come to give nourishment and not to take it … Nor is it strange that he, who in heaven enjoys the eternal bread of life, should have refused to accept human food on earth.[122]

The point of this soliloquy (not present in the original, anonymous *uita*) seems to be that angels, even when they appear in human form, will not eat—as angels they live instead on heavenly 'bread'—and that this was a clue to the real nature of Cuthbert's mysterious visitor.

In order to understand why the refusal of the angel to eat food was given such prominence in Bede's account of the story, we must go back to the biblical narrative that had provided the original model for the story of Cuthbert and the angelic guest. In the original telling of the story in the anonymous Lindisfarne *uita*, Cuthbert's angelic visitation was specifically linked to an Old Testament precedent: Cuthbert, wrote the anonymous author, was once visited by an angel in the form of a man, 'just as angels appeared to the patriarch Abraham in the valley of Mamre in the form of men'.[123] The three angels who visit Abraham in Chapter 18 of the Book of Genesis had been the subject of no little exegetical speculation (indeed, it was not until the fourth century that it was agreed that they were angels at all).[124] According to the Book of Genesis, Abraham prepared food for his guests and set it before them; 'when they had eaten' (*cumque comedissent*: Gen 18:9) they turned to Abraham and began to deliver their message to him.

'When they had eaten'—for later Jewish and Christian readers of Genesis, this short statement was extremely problematic. It was a widespread supposition that spiritual beings did not eat food as humans did—how could it be that Scripture appeared to describe them as eating corporeal food?[125] Other books of the Bible offered parallels and possible elucidations. The angel who appeared to Manoah and his wife outright refused to eat the food he was offered ('I will not eat of your bread': Judg 13:16). In the Book of Tobit, the angel Raphael, after revealing his true nature to Tobias, explained that although he *appeared* to consume corporeal food he did not really do so: 'I seemed indeed to eat and to drink with you: but I enjoy food that is invisible, and drink that cannot be seen by men' (Tob 12:19). This statement of Raphael implied that the angels at Mamre only *seemed* to eat, and this was the line taken by many Jewish and Christian commentators. What then was the invisible food that nourished Raphael? Commentators equated it with the 'bread of angels' of Psalm 77:25 and the 'food of angels' of Wisdom 16:20.[126] It was none other than that unity with Christ enjoyed unceasingly by the angels and by the Elect in heaven.[127] Christ had declared himself the 'bread come down from heaven' (John 6:51): the bread of angels, therefore, was also the Eucharist.[128] The 'bread from heaven', the manna, that fed the Israelites in the desert (Ex 16:1–35), meanwhile, was a prefiguration of the Eucharist, as well as the food of the angels somehow made corporeal.[129] The story of Abraham's visitors who appeared to eat was thus, despite first appearances, the direct inspiration for the story of Cuthbert's angelic visitor who refused to eat. It was important for the moral of the latter story that the angel refuse corporeal food, so that the theme of angelic sustenance on the bread of life be brought out. 'Nor is it strange' opined Bede's Cuthbert, 'that he, who in heaven enjoys the eternal bread of life, should have refused to accept human food on earth'.[130] The wonderful bread that the guest had left—food 'of a kind that does not grow from the seeds of our harvests'[131]—was equivalent to the manna of the Israelites: a tangible and visible symbol of the spiritual bread that is Christ.

But Bede knew that angels could, in fact, make it so that they appeared to be eating. He said as much in one of his earliest references to angels: in *De natura rerum* he explained that angels take on bodies made of aether that make them appear as humans 'even in eating' (*etiam in edendo*).[132] This reference to the angels' power to appear to eat does not come from any of Bede's principal sources for *De natura rerum* and demonstrates he was mulling over this question already at this early stage. While the metrical and prose *uitae* of St. Cuthbert touched upon the theme the question of whether angels ate was sidestepped in those works and Bede did not come to tackle the question of angelic 'eating' head on until he composed the fourth book of his commentary on Genesis in the 720s.[133] In doing so, he waded into the midst of a centuries-old debate among exegetes about what exactly happened at Mamre—this was, as Peter Hunter Blair put it, a 'nice theological problem' for Bede to untangle.[134] For some early Jewish and

Christian thinkers, the answer was simple. Both classical and scriptural tradition suggested that angels were fiery beings—any food that was said to be 'eaten' was simply destroyed by the fiery nature of the angels' bodies. Judges 6:21, after all, depicted an angel touching food with his staff and causing it to be consumed by fire. Perhaps with this episode in mind,[135] Justin Martyr stated that when Genesis says the angels 'ate', 'it bears the same meaning as when we would say about fire that is has *devoured* all things; yet it is by no means to be understood that they *ate*, masticating with their teeth and jaws'.[136] This tradition was popular in the Greek East and was known in Britain—the Canterbury glosses record the opinion: 'it appeared as if [the angels] had eaten, but the food was invisibly consumed by fire'.[137] This explanation had a problem, however: it clashed with the literal words of Scripture. Others therefore argued that the angels did indeed *eat* but only in the sense that they chewed and swallowed the food, not that they derived any nourishment from it. Augustine, for instance, made the point: 'we ought not to think that the angels ate only in illusory appearance when those humans received them as guests'.[138] He felt that to say so was to misrepresent Scripture:

> *Venerunt ad abraham, et manducauerunt; et cum tobia angelus fuit, et manducauit. Quid dicimus, quia phantasma erat illa manducatio, et non erat uera? Nonne manifestum est, quod uitulum occidit abraham, panes fecit, et ad mensam posuit; ministrauit angelis, et manducauerunt? Omnia ista manifestissime facta et manifestissime expressa sunt.*
>
> They came to Abraham and they ate; and there was an angel with Tobias and he ate. What are we saying, that that act of eating was a phantom and was not genuine? Is it not evident that Abraham slaughtered a calf, made loaves, and placed these things on the table; that he attended to the angels and that they ate? All of these things plainly happened and were plainly expressed.[139]

When Raphael told Tobias that he only 'seemed' to eat and drink, he meant only that he seemed to take food in the same way as a human, 'from the need to restore the body' (*necessitate reficiendi corporis*).[140] The angels of Scripture did in fact eat, argued Augustine, even if they did not *require* this nourishment to survive. From Gregory the Great's brief discussion of the angels at Mamre it is clear that he also envisioned the angels having taken on bodies with which they were able to eat:

> *Nisi enim angeli quaedam nobis interna nuntiantes ad tempus ex aere corpora sumerent, exterioribus profecto nostris obtutibus non apparerent; nec cibos cum abraham caperent, nisi propter nos solidum aliquid ex caelesti elemento gestarent.*
>
> For unless the angels, while announcing to us certain internal things, had temporarily taken up bodies of air, they would not have appeared

to our external perception; nor could they have taken food with Abraham unless they were wearing for our sake something solid made from a heavenly element.[141]

Bede's rather long discussion of Abraham's three visitors represents a rare instance in *In Genesim* (outside of the creation narrative) in which he felt the need to set aside his allegorical commentary and explain how the events depicted actually took place in mechanical and physical terms.[142] He wrote that some readers were disturbed by the fact that Abraham seemingly treated the angels as if they were mortal, going so far as to serve them 'human foods' (*cibi humani*), even though he was clearly aware of their divine affiliations. Bede reassured his readers that Abraham, while he recognized that the men had come from God, did not understand that his visitors were angels. Otherwise he would never have made the mistake of serving them human food. 'And so the angels ate', Bede continued, 'or rather they seemed to have eaten'.[143] In reality, of course, angels do not subsist on human food—rather, they eat 'invisible food', as Raphael had declared in the Book of Tobit. This invisible food is the 'joy of contemplation' (*gaudium contemplationis*), and, as Bede went on to explain, angels are always able to see the face of God, even when visiting us on earth.[144] By seeming to eat, the three angels were prefiguring the coming of Christ, the 'angel of great counsel', who himself 'was to eat as if he were a man, not only by appearing visibly, but also by sitting and eating at the table' (*tamquam homo erat manducaturus, non solum uisibiliter apparendo, sed etiam ad mensam hominum residendo ac manducando*).[145]

But what happened to the food when the angels appeared to eat it? Previous attempts to answer this question had been rather unsatisfactory: the Greek tradition that angels simply burned corporeal food was incompatible with an *ad litteram* reading of Scripture, while the idea that angels *really* did eat human food was evidently unfeasible. Bede's answer is misleadingly simple. It stands as a good example of his skill at making seemingly incompatible parts of Christian tradition align with one another. He wrote:

> *Credibile est autem quod esca quam manducabant, statim ut spiritale uel aetherium corpus eorum contigit, uelut aqua ardenti flammae iniecta consumpta fuerit, et non, sicut aqua arenti terrae infusa, ad reficiendum corpus eorum profecerit, quomodo in nobis cum manducamus fieri solet.*
>
> It is likely that the food which they ate was consumed as soon as it touched their spiritual or aetherial body, like water thrown onto a burning flame, and did not, like water poured upon the thirsty ground, help to refresh their body, as usually happens in us when we eat.[146]

This fascinating hypothesis reveals much about Bede's understanding of the angelic body. First we ought to note that the verb Bede uses here—*manducare*—means 'to eat' in the sense of 'to chew', 'to masticate'—Bede,

in other words, did not agree with Justin Martyr that the angels only 'ate' in the same way that a fire is said to 'consume' anything it touches. Bede's angels, like Augustine's, chew their food. That food, however, was consumed in a manner which Bede likened to water evaporating on flame (is the implication here that there was a core, as it were, of 'true' angelic matter at the centre of the human-like body they had taken on?). Bede had successfully tweaked existing tradition, allowing for both interpretations (the Greek notion that the angels burned the food and the Augustinian-Gregorian argument that the angels ate in outward appearances) to co-exist. We might note as well that this explanation hinges on Bede's idea that angels take on aetherial bodies when they visit humankind—a change, as we have seen, from the traditional account. I noted above that Bede may have decided that the angels took on aetherial bodies because he was thinking of the future resurrected human body.[147] In fact, the analogy that Bede used to describe angelic digestion (water on parched earth and on fire) was derived from Augustine's discussions of the resurrection, and Bede himself used an extremely similar analogy when describing the resurrected human body.[148] This would also explain Bede's phrasing: he wrote about the angels' 'spiritual body', terminology usually deployed in discussions of the future human body. I think it likely that Bede thought of the assumed bodies of angels and the future bodies of humans as quite directly analogous—and that, like Augustine, he thought of this aetherial body as something material but also extremely rarified and subtle. In specifying that angels took on bodies of aether rather than of air, then, Bede was able to bring further harmony to the intellectual tradition that he had inherited and to concoct a neat and logical answer to the question of angelic digestion.

This entire endeavour may well seem an obtuse and pointless issue to modern eyes, too close to the parodic picture of medieval scholars counting angels on the head of a pin. But for Bede, and for the theologians of ancient and medieval Europe, it was a question of enormous importance, something that is clear from the long afterlife that this topic had after Bede's day. The idea was still alive a thousand years after Bede, at which time we find Milton purposefully going against received tradition and boldly claiming that angels *could* in fact eat human food.[149] For the rest of the middle ages, theologians generally agreed with Augustine and Bede that the angels had in fact eaten—they had chewed and swallowed—but that they had derived no nourishment from this food.[150] What happened to the food? Bede's analogy of water being consumed by flames was adapted by a variety of later writers.[151] Peter Comestor, in the twelfth century, would write: 'regarding the food that they took, it is possible to say that in chewing it was destroyed, like water by the heat of fire'.[152] Around the same time, Hildegard of Bingen would phrase it slightly more poetically: 'they eat as humans do, but their food vanishes like dew; when it falls upon grain it is dissolved immediately

by the heat of the sun'.[153] The following century, Albertus Magnus modified the idea to fit with the axioms of Scholastic thought: 'the food [when eaten by the angels at Mamre] was reduced into primitive matter, just like rainwater by the sun and like combustible materials through fire'.[154] In the Middle English *Genesis and Exodus* (composed *c*.1250), based on Comestor's work, the theme reappears:

So malt ðat mete in hem to nogt,
So a watres drope in a fier brogt.[155]

That food melted in them to nothing,
As a drop of water brought into a fire.

Of course, Bede's idea about the spiritual body of the angels burning up corporeal food is dependent on the supposition that angels take on aetherial or fiery bodies when they visit the world. A number of important later theologians would prefer the idea—found already in Gregory and Isidore—that angels assumed bodies of air, and for them Bede's image of food being burned up had little hold.[156]

Conclusion

It was a self-evident fact for Bede that the cosmos is populated by a host of wicked and benevolent spirits. Invisible and intangible, their activity nevertheless has a very real effect on the natural world and on the day-to-day life of humankind. In developing his angelology and demonology, Bede brought a characteristic level of inventiveness and logical synthesis to the issues that had preoccupied the Fathers of the Church. Bede's angelology and demonology was more precise and certain than the models of late ancient writers like Augustine and Gregory. It may be that unlike those Church Fathers, who could rely to a certain extent on common assumptions among their readership about matter and spirit, Bede felt the need to carve out with precision the details of the invisible world.

The issue of angelic bodies points us towards a line of enquiry which we cannot hope to satisfactorily answer: namely, to what extent had Bede worked things out in advance? By the time he wrote *De natura rerum*, in 703, Bede had decided that angels took on aetherial bodies rather than the aerial ones favoured by some authorities. Many years later, in the pages of *In Genesim*, this idea lent itself to an explanation of what happened to the food at Mamre. Had the latter interpretation influenced his earlier decision to plump for aether over air or was it simply a happy coincidence? The fact that Bede also referred to angels eating in that same line of *De natura rerum* suggests that he may well already have been mulling this question over in 703. If so, it is more evidence that cosmological speculation was not an occasional dalliance but a regular component of his intellectual life.

Notes

1 Adomnán, *Vita Columbae* 2.16 (ed. Anderson and Anderson, 358–60); Gregory, *Dialogi* 1.4.7 (ed. de Vogüé, SC 260, 42–4).
2 *Altus Prosator* H (ed. Blume, 46; trans. Clancy and Márkus, 47): 'cuius aeris spatium constipatur satellitum / globo … turbido perduellium'.
3 Hilary, *Tractatus super Psalmos* 118.7 (ed. Doignon, CCASL 61A, 11): 'omne hoc uacuum quod putatur repletum est angelis Dei nihilque est quod non haec diuinorum ministeriorum frequentia incolat'.
4 Adomnán, *Vita Columbae* 3.23 (ed. Anderson and Anderson, 530): 'totaque spatia aeris, usque ad ethera caelorum, eorundem angelorum claritate inlustrata'.
5 Sowerby, *Angels in Early Medieval England*, 3–12.
6 Sowerby, *Angels in Early Medieval England* touches on Bede. M. Alexander, 'Angels in Bede, Demons in *Beowulf*', in L. Carruthers (ed.), *Anges et démons dans la littérature Anglaise du Moyen Âge* (Paris, 2002), 29–37 provides a short discussion.
7 Smith, 'How Thin is a Demon?'; Smith, 'Physics and Metaphysics'; O'Neill, 'You have been in Afghanistan, I perceive'; S O'Neill, 'The Demonic Body: Demonic Ontology and the Domicile of the Demons in Apuleius and Augustine', in B.W. McCraw and R. Arp (eds), *Philosophical Approaches to Demonology* (Abingdon, 2017), 39–58; S. O'Neill, 'Evil Demons in the *De Mysteriis*: Assessing the Iamblichean Critique of Porphyry's Demonology', in L. Brisson, S. O'Neill and A. Timotin (eds), *Neoplatonic Demons and Angels* (Leiden, 2018), 160–89.
8 For studies that look at demons through a psychological prism, see above, 122 n116.
9 Smith, 'How Thin', 481.
10 Smith, 'How Thin', 482.
11 B.W. McCraw and R. Arp (eds), *Philosophical Approaches to Demonology* (Abigndon, 2017); Keck, *Angels and Angelology in the Middle Ages* (Oxford, 1998); J. Raymond, *Conversations with Angels: Essays Towards a History of Spiritual Comminication, 1100–1700* (Basingstoke, 2011). The quotation is from Henry More, *The Immortality of the Soul* (London, 1659), 341–2.
12 P. Marshall and A. Walsham (eds), *Angels in the Early Modern World* (Cambridge, 2006); S. Clark, *Thinking with Demons: The Idea of Witchcraft in Early Modern Europe* (Oxford, 1997).
13 N. Vos and W. Otten (eds), *Demons and the Devil in Ancient and Medieval Christianity* (Leiden, 2011).
14 On late antique and early medieval conceptions of angels, see Peers, *Subtle Bodies*; Keck, *Angelology*; Muehlberger, *Angels*; H. Mayr-Harting, *Perceptions of Angels in History* (Oxford, 1998); S.-T. Bonino, *Les anges et les démons: Quatorze leçons de théologie* (Paris, 2007); Sowerby, *Angels in Early Medieval England*; Alexander, 'Angels in Bede, Demons in *Beowulf*'. On the development of ideas about demons in the same period, see J. Feros Ruys, *Demons in the Middle Ages* (Kalamazoo, MI, 2017); H.A. Kelly, 'Demonology and Diabolic Temptation', *Thought: Fordham University Quarterly* 40 (1965), 165–94.
15 D.B. Martin, 'When Did Angels Become Demons?', *Journal of Biblical Literature* 129 (2010), 657–77.
16 Ps 95:5; cf. Deut 32:17; 1 Cor 10:20; Origen, *Contra Celsum*, 7.69 (ed. Marcovich, 518–19); Justin Martyr, 2 *Apology* 4.4–6 (ed. Minns and Parvis, 282–4); Augustine, *DCD* 9.23 (ed. Dombart and Kalb, CCSL 47, 398–400).
17 J. Daniélou, *The Angels and Their Mission*, trans. D. Heimann (Westminster, MD, 1957), 3–13; Muehlberger, *Angels*, 72–87.
18 See the examples collated in E. Peterson, *The Angels and the Liturgy*, trans. R. Walls (New York, 1964), 31–40; cf. R.C.D. Jasper and G.J. Cuming, *Prayers of the Eucharist: Early and Reformed*, 4th ed. (Collegeville, 2019), passim.

19 Bede, *Hom*. 2.10 (ed. Hurst, CCSL 122, 248–9).
20 Bede, *Hom*. 2.10 (ed. Hurst, CCSL 122, 249).
21 Bede, *EA* 2.25 (ed. Gryson, CCSL 121A, 435; trans. Wallis, 215): 'Duplex est, ut Hieronimus ait, angelorum officium, "aliorum qui praemia iustis tribuant, aliorum qui singulis praesunt cruciatibus"'.
22 Bede, *VF* (PL 94, 790–1); Bede, *VCP* 2; 7; 17 (ed. Colgrave, 158–60; 174–8; 216); Bede, *HE* 3.8; 3.19; 4.3; 5.12; 5.19 (ed. Lapidge, SC 490; 54–6; 102–10; 212; SC 491; 68–80; 126).
23 Bede, *VCP* 7 (ed. Colgrave, 178).
24 Sowerby, *Angels in Early Medieval England*, 60–7.
25 Sowerby, *Angels in Early Medieval England*, 70–5.
26 A. Diem, 'Encounters between Monks and Demons in Latin Texts of Late Antiquity and the Early Middle Ages', in K.E. Olsen, A. Harbus, and T. Hofstra (eds), *Miracles and the Miraculous in Medieval Germanic and Latin Literature*, Germania Latina 5 (Groningen, 2004), 51–67, at 52–5; N.H. Baynes, 'St. Antony and the Demons', *The Journal of Egyptian Archaeology* 40 (1954), 7–10.
27 As in, for instance, Adomnán, *Vita Columbae* 3.8 (ed. Anderson and Anderson, 480); *VCA* 3.1 (ed. Colgrave, 96).
28 Bede, *HE* 4.26 (ed. Lapidge, SC 490, 362): 'spirituum malignorum frequentia'. Cf. Bede, *VCM* 15 (ed. Jaager, 87); Bede, *VCP* 17 (ed. Colgrave, 214).
29 Bede, *Epistola ad Ecgbertum* 5 (ed. Grocock and Wood, 132).
30 Above, 109–10.
31 For an overview, see E. Sorensen, *Possession and Exorcism in the New Testament and Early Christianity* (Tübingen, 2002); H.C. Kee, *Medicine, Miracle and Magic in New Testament Times*, Society for New Testament Studies Monograph Series 55 (Cambridge, 1986), 21–6; E. Ferguson, *Demonology of the Early Christian World* (New York, 1984), 51–9; N. Caciola, *Discerning Spirits: Divine and Demonic Possession in the Middle Ages* (Ithaca, NY, 2003).
32 F. Young, *A History of Exorcism in Catholic Christianity* (London, 2016), esp. 27–59.
33 See further, E. Ferguson, 'Exorcism', in E. Ferguson (ed.), *Encyclopedia of Early Christianity*, 2nd ed. (New York, 1998), 411–12; R.M. Jensen, *Baptismal Imagery in Early Christianity: Ritual, Visual, and Theological Dimensions* (Grand Rapids, MI, 2012), 31–40, 209–14; E. Ferguson, *Baptism in the Early Church: History, Theology, and Liturgy in the First Five Centuries* (Grand Rapids, MI, 2009), passim; F. Young, *A History of Exorcism*, 31, 33, 37.
34 Bede, *In primam partem Samuhelis* 3.17.53 (ed. Hurst, CCSL 119, 162).
35 Bede, *HE* 5.6 (ed. Lapidge, SC 491, 38); cf. Colgrave and Mynors, *Bede's Ecclesiastical History*, 468 n1; S. Foot, '"By Water in the Spirit": The Administration of Baptism in Early Anglo-Saxon England', in J. Blair and R. Sharpe (eds), *Pastoral Care before the Parish* (Leicester, 1992), 171–92, at 177.
36 Bede, *HE* 4.13 (ed. Lapidge, SC 490, 266).
37 Bede, *In Tob*. 8 (ed. Hurst, CCSL 119B, 11).
38 Bede, *Epistola ad Ecgbertum* 15 (ed. Grocock and Wood, 152).
39 Bede, *HE* 3.11 (ed. Lapidge, SC 490, 68–70); Bede, *VCP* 15 (ed. Colgrave, 204), 41 (ed. Colgrave, 288).
40 Daniélou, *Angels*, 107–17.
41 Gregory, *Dialogi* 1.12.2, 4.37.3–4 (ed. de Vogüé, SC 260, 114; SC 265, 126–8).
42 Gregory, *Dialogi*, 2.35.3 (ed. de Vogüé, SC 260, 238).
43 Gregory, *Dialogi* 4.20.4 (ed. de Vogüé, SC 265, 76).
44 Boniface, *Ep*. 10 (Tangl, 13).
45 Bede, *De tab*. 2.615–17 (ed. Hurst, CCSL 119A, 57).
46 As in the case of Hereberht and Cuthbert, see above 102.
47 Sowerby, *Angels*, 132–4.

48 Bede, *HE* 5.13 (ed. Lapidge, SC 491, 84–90).
49 Bede, *HA* 14 (ed. Grocock and Wood, 54).
50 Cf. R. Cline, *Ancient Angels: Conceptualizing Angeloi in the Roman Empire* (Leiden, 2011), 19–46.
51 *DOC* 2.15 (ed. Díaz y Díaz, 96).
52 Bede, *De tab*. 1.531–4 (ed. Hurst, CCSL 119A, 18; trans. Holder, 18): 'ut in alto sedem habere angeli et quasi leui uolatu ubique discurrere posse signentur neque ullam habere tarditatem quin confestim ubicumque uoluerint adsint'; cf. Isidore, *Etymologiae* 7.5.3 (ed. Lindsay).
53 Augustine, *De trinitate* 3.1.5 (ed. Mountain, CCSL 50, 131).
54 Isidore, *De differentiis* 14 (ed. Sanz, 28); Gregory, *Moralia* 28.1 (ed. Adriaen, CCSL 143B, 1397).
55 Particularly important here was the *De Deo Socratis* of Apuleius: Apuleius, *De Deo Socratis* (ed. Moreschini).
56 Sanchez, 'Priscillien et la culture antique: étude des *potestates uentorum*', *Revue Bénédictine* 121 (2011), 5–17, at 14–15.
57 Augustine, *Confessio* 10.42 (ed. Verheijen, CCSL 27, 191); Augustine, *Enarrationes in Psalmos* 100.12 (ed. Dekkers and Fraipont, CCSL 39, 1416); *DOC* 6.8 (ed. Díaz y Díaz, 124).
58 Isidore, *Etymologiae* 8.11.17 (ed. Lindsay; trans. Barney et al., 184): 'in aeriam qualitatem conversi sunt, nec aeris illius puriora spatia, sed ista caliginosa tenere permissi sunt, qui eis quasi carcer est usque ad tempus iudicii'.
59 *DOC* 10.11 (ed. Díaz y Díaz, 162).
60 Schlapbach, '*De divinatione daemonum*', in K. Pollmann and W. Otten (eds), *The Oxford Guide to the Historical Reception of Augustine* (Oxford, 2013), 132.
61 Augustine, *De diuinatione daemonum* 3 (ed. Zycha, CSEL 41, 603): 'ut aerii corporis sensu terrenorum corporum sensum facile praecedant'.
62 *Augustine, De diuinatione daemonum* 5 (ed. Zycha, CSEL 41, 607–8).
63 Augustine, *De diuinatione daemonum* 3 (ed. Zycha, CSEL 41, 603–5).
64 Bede, *DNR* 2 (ed. Jones, CCSL 123A, 192). In *De natura rerum* he quoted verbatim from Junillus's *Instituta* to this effect, but the idea owes its ultimate origin to Augustine, who argued that the angels should be read as being included in the 'light' that Genesis says was created on the first day (see above, 62; Muehlberger, *Angels*, 49).
65 Bede, *DNR* 7 (ed. Jones, CCSL 123A, 198): 'uirtutes continet angelicas'.
66 Bede, *DTR* 5 (ed. Jones, CCSL 123B, 286).
67 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 4).
68 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 31).
69 Cf. Muehlberger, *Angels*, 44.
70 Bede, *In Luc.* 1.1.19–20 (ed. Hurst, CCSL 120, 27).
71 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 216; trans. Kendall and Wallis, 89): 'Vbi … potestates aereae superna sede deturbatae cum tormento diem iudicii durius tunc damnandae praestolantur'.
72 Bede, *EA* 3.28 (CCSL 121A, 459).
73 Bede, *EA* 2.20 (ed. Gryson, CCSL 121A, 393).
74 Adapted from the English translation given in Hurst, *Bede: Commentary on the Seven Catholic Epistles*. 136. Bede also had access to the older Latin version, which spoke of God 'thrusting them back in the prisons of the dark lower world' (*carceribus caliginis inferi retrudens*).
75 Bede, *IESC* 3.2.4 (ed. Hurst, CCSL 121, 269; trans. adapted from Hurst, 136): 'iam poenaliter hunc inferum, hoc est inferiorem caliginosum aerem, tamquam carcerem acceperint'.
76 Bede, *IESC* 3.2 (ed. Hurst, CCSL 121, 269–70).

77 Bede, *De eo quod ait Isaias* (PL 94, 706): 'qui saepe in Scripturis coelum nuncupatur'.
78 Bede, *IG* 4.15 (ed. Jones, CCSL 118A, 197); Bede, *In Sam.* 3.17 (ed. Hurst, CCSL 119, 158).
79 Bede, *Exp Act Ap* 1.18 (ed. Laistner, CCSL 121, 12).
80 Bede, *IESC* 2.1.12 (ed. Hurst, CCSL 121, 229; trans. Hurst, 76): 'immortalem deitatis magnificentiam … claritatem semper aspicere gaudeant'.
81 Bede, *IG* 4.18 (ed. Jones, CCSL 118A, 216): 'etiam cum ad nos aliqua ministraturi foris ueniunt'.
82 Bede, *In Luc.* 1.1 (ed. Hurst, CCSL 120, 27): 'etsi circumscriptus est angelicus spiritus summus tamen spiritus ipse qui deus est circumscriptus non est'. Bede was quoting from Gregory, *Homiliae in Evangelia* 2.34.13 (ed. Etaix, CCSL 141, 313).
83 Bede, *In Luc.* 1.1.19–20 (ed. Hurst, CCSL 120, 27).
84 Bede, *IESC* 1.3.6 (ed. Hurst, CCSL 121, 205).
85 Bede, *DNR* 7 (ed. Jones, CCSL 123A, 198; trans. Kendall and Wallis, 77): 'Quae ad nos exeuntes, aetherea sibi corpora summunt, ut possint hominibus etiam in edendo similari, eademque ibi reuersae deponunt'.
86 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 216).
87 Augustine, *Ep.* 9.3 (ed. Goldbacher, CCSL 34.1, 21); Augustine, *DCD* 10.9 (ed. Dombart and Kalb, CCSL 47, 281–3); cf. O'Daly, *Augustine's Philosophy of Mind*, 122 n32; S. O'Neill, '*aequales angelis sunt*: Angelology, Demonology, and the Resurrection of the Body in Augustine and Anselm', *The Saint Anselm Journal* 12 (2016), 1–18; D. Elliott, *Fallen Bodies: Pollution, Sexuality, and Demonology in the Middle Ages* (Philadelphia, 1999), 240–1, n5.
88 Augustine, *De diuersis quaestionibus octoginta tribus* 47 (ed. Mutzenbecher, CCSL 44A, 74). See further discussion, see Chapter 8, 229–30.
89 Bede, *HE* 3.8 (ed. Lapidge, SC 490, 54).
90 Bede, *VCP* 2 (ed. Colgrave, 158–60).
91 Bede, *HE* 5.19 (ed. Lapidge, SC 491, 126).
92 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 70).
93 Bede, *HE* 5.13 (ed. Lapidge, SC 491, 86).
94 Bede, *VF* (PL 94, 791).
95 Compare for instance, Felix's rambunctious depiction of the evil spirits who attacked St. Guthlac in *Vita Guthlaci* 31 (ed. Colgrave, 100–2).
96 Bede, *HE* 5.13 (ed. Lapidge, SC 491, 86).
97 Bede, *DNR* 25 (ed. Jones, CCSL 123A, 216; trans. Kendall and Wallis, 89): 'quo hominibus apparentes aeria sibi corpora meritis similia sumunt'.
98 Bede, *HE* 1.17 (ed. Lapidge, SC 489, 172): 'concitant procellas, caelum diemque nubium nocte subducunt'. Cf. Constantius, *Vita Germani* 13 (ed. Borius, SC 112, 146).
99 Bede, *VCP* 13 (ed. Colgrave, 198).
100 Bede, *VCP* 17 (ed. Colgrave, 216).
101 O'Daly, *Augustine's Philosophy of Mind*, 122–4.
102 Augustine, *De diuinatione daemonum* 5 (ed. Zycha, CSEL 41, 607): 'suadent autem miris et inuisibilibus modis per illam subtilitatem corporum suorum corpora hominum non sentientium penetrando et se cogitationibus eorum per quaedam imaginaria uisa miscendo, siue uigilantium siue dormientium'.
103 Cassian, *Conlationes* 7.12 (ed. Petschenig, CSEL 13, 191).
104 Cassian, *Conlationes*, 7.13 (ed. Petschenig, CSEL 13, 192).
105 Cassian, *Conlationes* 7.12 (ed. Petschenig, CSEL 13, 191).
106 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 60): 'cum demon in eis loquitur … sciunt quid loquantur'.
107 Bede, *In Sam.* 3.20 (ed. Hurst, CCSL 119, 187).

108 Bede, *VCP* 15 (ed. and trans. Colgrave, 204–5): 'ita ut stridendo dentibus, uoces miserabiles emittendo, brachia uel caetera sui corporis membra in diuersa raptando, non minimum cunctis intuentibus uel audientibus incuteret horrorem'.

109 Bede, *VCP* 41 (ed. and trans. Colgrave, 288–9): 'atrocissimo demone … ita ut sensu rationis funditus amisso clamaret, eiularet, et uel sua membra uel quicquid attingere posset, morsibus dilaniare niteretur'.

110 Bede, *IG* 1.3 (ed. Jones, 118A, 59); Augustine, *DGAL* 11.2 (ed. Zycha, CSEL 28.1, 336).

111 Bede, *In Marc*. 2.7.20–1 (ed. Hurst, CCSL 120, 522).

112 Bede, *Expositio actuum apostolorum* 5.3 (ed. Laistner, CCSL 121, 29; trans. Martin, 57): 'animam et mentem hominis nulla creatura iuxta substantiam possit implere'. Bede was quoting more or less verbatim from Jerome's translation of Didymus's *De spiritu sancto* 60 (PL 23, 151).

113 Respectively *VCA* 2.2 (ed. Colgrave, 76) and *Vita Gregorii papae* 16 (ed. Colgrave, 100). The case for Bede's familiarity with the latter has been made in A. Thacker, 'Memorializing Gregory the Great: The Origin and Transmission of a Papal Cult in the Seventh and Early Eighth Centuries', *EME* 8 (1998), 59–84, at 69–70.

114 *HE* 2.12 (ed. Lapidge, SC 489, 358): 'ut intellegeret non hominem esse qui sibi apparuisset, sed spiritum'. This is not the only change that Bede made to the original narrative. In the original, the stranger looked like Paulinus, the missionary to Northumbria—the implication is that the angel had taken on Paulinus's form for the purposes of Edwin's conversion. Bede changed the story in a way that indicates that he perceived a problem with the original. In his version, Edwin's visitor was simply an angel, not a doppelgänger of Paulinus. As Richard Sowerby notes, something about the idea that a spirit could assume the appearance of a living person 'had evidently troubled Bede' (Sowerby, *Angels*, 10). Bede's distaste for this aspect of the previous version of the story may have arisen from the Augustinian theory that souls were recognizable to one another—Bede may not have wished to muddy the waters by suggesting that angels routinely took on appearances not their own.

115 Bede, *DNR* 7 (ed. Jones, 123A, 198).

116 *VCA* 2.2 (ed. Colgrave, 76–8); Bede, *VCM* 7 (ed. Jaager, 72–3); Bede, *VCP* 7 (ed. Colgrave, 176–8).

117 Bede, *VCP* 7 (ed. Colgrave, 176): 'Explorat uestigia qua iret, sed nulla uspiam inuenit. Recens autem nix terram texerat, quae facillime uiantis iter proderet, et quo declinaret monstraret'. The version from the anonymous *uita* was slightly less forceful: 'he did not find him nor even his footprints although there was snow over the surface of the ground' (*non inuenit eum ibi, nec uestigia pedum eius. Iam enim niuis erat super faciem terrae*); *VCA* 2.2 (ed. Colgrave, 78; trans. Colgrave, 79).

118 Bede, *VCM* 7.204–5 (ed. Jaager, 72–3).

119 Bede, *VCP* 7 (ed. Colgrave, 176).

120 Bede, *VCP* 7 (ed. and trans. Colgrave, 176–7): 'ut horam diei tertiam etiam cibo reficiendus expectaret rogauit, ne si ieiunus iret, fame pariter et frigore lassaretur hiberno'.

121 Bede, *VCP* 7 (ed. Colgrave, 176–8).

122 *VCP* 7 (ed. Colgrave, 178). Cf. *VCM* 7 (ed. Jaager, 74): 'nor is it strange that the nobleman, who enjoys the perpetual bread of life throughout eternity, refused our food' (*nec mirum, nostras dives quod respuit escas, Perpetuo vitae fruitur qui pane per aevum*).

123 *VCA* 2.2 (ed. Colgrave, 76) 'sicut patriarchae Abrahe in ualle Mambre angeli in forma uirorum apparuerunt'.

124 E. Grypeou and H. Spurling, 'Abraham's Angels: Jewish and Christian Exegesis of Genesis 18–19', in E. Grypeou and H. Spurling (eds), *The Exegetical Encounter between Jews and Christians in Late Antiquity* (Leiden, 2009), 181–203, at 189–97; L. Thunberg, 'Early Christian Interpretations of the Three Angels in Gen. 18', *Studia Patristica* 7 (1966), 560–70; W.T. Miller, *Mysterious Encounters at Mamre and Jabbok* (Chico, CA, 1984).

125 D. Goodman, 'Do Angels Eat?', *Journal of Jewish Studies* 37 (1986), 160–75; K.P. Sullivan, *Wrestling with Angels: A Study of the Relationship between Angels and Humans in Ancient Jewish Literature and the New Testament* (Leiden, 2004), 179–95; U. Schwab, 'Proskynesis und Philoxenie in der altsächsischen Genesisdichtung', in C. Meier and U. Ruberg (eds), *Text und Bild: Aspekte des Zusammenwirkens zweier Künste in Mittelalter und früher Neuzeit* (Wiesbaden, 1980), 209–77, at 258–60.

126 T. Nicklas, '"Food of the Angels" (Wis 16:20)', in G.G. Xeravits and J. Zsengellér (eds), *Studies in the Book of Wisdom* (Leiden, 2010), 83–100.

127 See Bede, *IG* 4.19 (ed. Jones, 118A, 227; trans. Kendall, 305), where the blessed Lot

> *qui caeli ciues in suum introduxit hospitium suisque refecit epulis, ab eis ipse in habitacula celestia introduceretur. Vbi pane angelorum perpetuo … reficeretur.*

> who brought the citizens of heaven [the angels] into his guest-chamber and refreshed them with his feast, was himself brought by them into the heavenly dwelling-place, where he would be refreshed forever with the bread of the angels.

128 E.J. Kilmartin, *The Eucharist in the West: History and Theology* (Collegeville, MI, 1998); J.T. O'Connor, *The Hidden Manna: A Theology of the Eucharist*, 2nd ed. (San Francisco, 2005).

129 J. Zsengellér, '"The Taste of Paradise": Interpretation of Exodus and Manna in the Book of Wisdom', in G.G. Xeravits and J. Zsengellér (eds), *Studies in the Book of Wisdom* (Leiden, 2010), 197–216.

130 Bede, *VCP* 7 (ed. Colgrave, 178): 'Nec mirum quod epulas in terris sumere respuerit humanas, qui aeterno uitae pane fruitur in coelis'.

131 *VCM* 7.207 (ed. Jaager, 73): 'Qualia non surgunt nostrae de germine messis'.

132 Bede, *DNR* 7 (ed. Jones, 123A, 198).

133 Briefly discussed in McCready, *Miracles and the Venerable Bede*, 60–1.

134 P. Hunter Blair, *Northumbria in the Days of Bede* (London, 1976), 144.

135 D.C. Allison, *Testament of Abraham*, Commentaries on Early Jewish Literature (Berlin, 2003), 144.

136 Justin Martyr, *Dial*. 56 (trans. from E.R. Goodenough, *The Theology of Justin Martyr*, 194–5).

137 *Commentarius primus in Pentateuchum* 110 (ed. and trans. Bischoff and Lapidge, 324–5): 'apparuit quasi manducassent, sed inuisibiliter igne consumtus est'.

138 Augustine, *DCD* 13.22 (ed. Dombart and Kalb, CCSL 48, 405): 'neque enim in phantasmate angelos edisse credendum est, quando eos homines hospitio susceperunt'.

139 Augustine, *Serm*. 362 (PL 39, 1617).

140 Augustine, *DCD* 13.22 (ed. Dombart and Kalb, CCSL 48, 405).

141 Gregory, *Moralia* 28.1 (ed. Adriaen, CCSL 143B, 1399).

142 On Bede's discussion of this episode and its trinitarian connotations, see Jones, 'Some Introductory Remarks', 184–91; Miller, *Mysterious Encounters*, 88–9.

143 Bede, *IG* 4.18 (ed. Jones, CCSL 118A, 215–16): 'Comederunt autem angeli uel potius comedisse uidebantur'.

144 Bede, *IG* 4.18 (ed. Jones, CCSL 118A, 216).

145 Bede, *IG* 4.18 (ed. Jones, CCSL 118A, 216).
146 Bede, *IG* 4.18 (ed. Jones, CCSL 118A, 216; trans. Kendall, 294).
147 134.
148 See below 229–30.
149 R.H. West, 'Milton's Angelological Heresies', *Journal of the History of Ideas* 14 (1953), 116–23.
150 F.T. Harkins, 'The Embodiment of Angels: A Debate in Mid-Thirteenth-Century Theology', *Recherches de Théologie et Philosophie médiévales* 78 (2011), 25–58, at 44–7.
151 I owe most of these references to Schwab, 'Proskynesis und Philoxenie', 259 n173.
152 Peter Comestor, *Scolastica Historia: Liber Genesis* 51 (ed. Sylwan, CCCM 191, 97): 'de cibo quem sumpserunt potest dici, quod in masticando exinanitus sit, sicut aqua calore ignis'.
153 Hildegard of Bingen, *Solutiones triginta octo quaestionum* 8 (ed. Evans, CCCM 226A, 115; trans. Kienzle, 50–1): 'ipsique ut homines comedentes, sed eorum cibus evanescit tanquam ros, qui semper super granum cadens, a calore solis in momento dissolvitur'.
154 Albertus Magnus, *Commentarii in secundum librum Sententiarum* 8A.5 (ed. Borgnet, 175): 'cibus redactus est in praejacentem materiam, sicut aqua pluvialis sole, et sicut combustibilia per ignem'. On the term *praeiacens materia* (translated here as 'primitive matter'), see A. Fitzpatrick, *Thomas Aquinas on Bodily Identity* (Oxford, 2017), 157–8; F. Tasca, '"Beda a communione separatus"? Una singolare testimonianza custodita nell'Historia Scholastica del maestro parigino Pietro Comestor', *Revue Bénédictine* 120 (2010), 216–42, 225–6. The term referred to a theorized basic, prototypical state of matter. This, for instance, was the state that the universe was in after the simultaneous creation, but before God had started the work of the six days. According to Scholastic thought, matter cannot be destroyed, it can only be reduced to *praeiacens materia*—this is what happens to objects burned by fire, for instance. This is a good example of how a theory proposed by Bede in the eighth century could be radically transformed simply through transposition to a different philosophical context.
155 *Middle English Genesis and Exodus* 1017–18 (ed. Arngart, 79). My thanks to David Callander for his help with the translation.
156 See, for instance, Thomas Aquinas, *Pars prima summa theologiae* 51.2 (Editio Leonina 5, 16–17).

6 God and creation

The single most important division in Bede's cosmos was between that which had been created and the creator. In Chapter 3, I discussed the complicated nature of the doctrine of creation and the deft manner in which Bede dealt with the four different senses of God's creative power. The cosmos and everything in it had been created *ex nihilo* by God, who had also shaped the primordial elements into a physical form over the course of six days, and—most importantly—God continued to exert his creative power even after the initial moment of creation.[1] We will have reason to return to this theme later in the chapter.

A concomitant point which will be explored in this chapter is the anthropomorphic and moral character of the cosmos in Bede's thought—and in early medieval western Latin thought in general—in contradistinction to what has been termed the 'cosmic nihilism' of modern philosophy and science (and even the incipient cosmic nihilism of later medieval philosophy).[2] 'The cosmos is alien and inhuman and the values we cherish have no realization in it'—this is how one historian summarizes the views of twentieth-century philosopher Bertrand Russell,[3] but for much of the history of human written culture—and still today in many quarters—the assumption has been that the external world aligns in some important respects with human inclinations and morality. In general terms, this was true of Plato and would be true of Aquinas. But the Augustinian image of a God whose power extended through all things and who comprehensively regulated all occurrences in the cosmos led to a vision of divine providence that was particular to the late ancient and early medieval Latin West, and that found one of its most articulate proponents in Bede. This 'strong' iteration of the theory of providence also led Bede to make a large number of original observations in which he was less than usually reliant on quotation from patristic texts.

The nature of God

It would scarcely be possible to provide in this chapter a comprehensive survey of early Christian conceptions of God. The subject is vast, and the ways in which a scholar like Bede would have thought of the issue cannot be

done justice in such a short space. My aim, then, is to provide an overview of Bede's understanding of God insofar as it relates directly to the themes of this book: in other words, this chapter will be concerned with Bede's understanding of God's nature, in the context of the physical and metaphysical ideas discussed thus far, and of God's relationship with his creation. For Bede, many of the details regarding the nature and attributes of God were a matter of faith, having been set in stone by Church councils, and his understanding of these things did not deviate in any major respect from what had been established by previous generations of Christians. Some aspects of God's nature were, however, less defined—particularly when it came to the interaction between Creator and creation—and it is here that we find the most unique elements of Bede's theology.

A central tenet of Christian belief was that the Godhead was composed of 'three persons' (*tres personae*) but 'one substance' (*una substantia*): God (the Father), Christ (the Son) and the Holy Spirit.[4] All three persons were co-eternal, though the Holy Spirit was held to 'proceed' from the Father and (in the Latin West) the Son.[5] The episcopal council convened by Theodore in 680 at Hatfield included in its credal statement a précis of orthodox trinitarianism that serves as a good example of how things stood in Bede's day:

> *confitemur secundum sanctos patres proprie et ueraciter patrem et filium et spiritum sanctum trinitatem in unitate consubstantialem et unitatem in trinitate, hoc est unum Deum in tribus subsistentiis uel personis consubstantialibus aequalis gloriae et honoris*
>
> Following the holy fathers, we correctly and truthfully confess the Father and the Son and the Holy Spirit—the Trinity, consubstantial in unity and united in the Trinity—that is, one God in three consubstantial subsistences or persons of equal glory and honour.[6]

God, as presented in some parts of the Old Testament, was very like a human. Though some early Christians apparently held to the view that God had a body akin to that of a human, this notion was discarded relatively quickly.[7] It is interesting to note, however, that Bede spent no little time in his commentary on Genesis carefully explaining that the anthropomorphic language used to describe God in Scripture was to be taken metaphorically. 'God', he conscientiously noted, 'is spirit, nor is his unmixed substance believed to have been composed of the lineaments of corporeal members, except by the uneducated'.[8] He patiently reminded the reader that, although Scripture often depicted God 'speaking', it was not the case that God had a mouth or that he formed sounds like a human. 'With God intellection is simple', explained Bede, 'without the noise and diversity of languages'.[9] This suggests that, despite the well-established idea in orthodox theology of God as a non-anthropomorphic, non-corporeal being, Bede felt that his less learned readers were at risk of going astray while reading these passages if he did not provide the proper guidance.

What, then, was God? The nature of God was, in the end, inherently unknowable to human minds. The conceit that God was ineffable formed an integral part of antique Christian conceptualizations of the divine.[10] As Pope Boniface V (d 625) put it, in a letter addressed to King Edwin of Northumbria and reproduced by Bede in the *Historia ecclesiastica*, 'the power of the highest divinity, which endures in his invisible and unsearchable eternity and greatness, cannot be explained by the faculty of human speech'.[11] One consistent method of defining God's attributes was to speak of what God was *not*.[12] Some of this language of negative definition arose out of the abstract dichotomies (being versus becoming; infinite versus finite) of classical philosophy. This negative or apophatic theology often dovetailed with another approach which sought to define God in relation to the material, created world. If the world was corporeal, mutable, finite, contained and dependent on a Creator for its existence, God was incorporeal, immutable, infinite, uncontained and completely independent.[13] This process of defining God negatively and in relation to his creation was a powerful and influential tool for thinking about the ineffable. As I noted previously, it seems to have been the impetus for theologians to begin thinking of angels and souls as relatively embodied beings.[14] It would also influence Christian beliefs about the corporeality of God. In the words of one scholar of patristic theology, 'it was the ontological distinction between the uncreated God and creation that drove the early Christian understanding of God as immaterial'.[15] Unlike angels and souls (about whom there was much difference of opinion, as we have seen) it was held by practically every theologian that God had no 'body'—he was not bounded in any way by space or place.

Patristic theologians emphasized the idea that God was transcendent of the world but his power was immanent in the world. They held that God, as per Scripture (Wis 1:7), 'contained' (*continere*) the world but was not contained by it.[16] The word *continere* had important connotations: Stoic philosophers had spoken in this way of the *logos*, the force that imbues the universe and that 'causes a cohesion within bodies and binds them together'.[17] To speak of God 'containing' the world, therefore, was to speak of God as the sustaining and preserving power that underlies all things in the universe. Augustine, in a famous passage from his *Confessio*, spoke of the relationship between God and creation as follows:

> *feci … te autem, domine, ex omni parte ambientem et penetrantem eam, sed usquequaque infinitum, tamquam si mare esset ubique et undique per immensa infinitum solum mare et haberet intra se spongiam quamlibet magnam, sed finitam tamen, plena esset utique spongia illa ex omni sua parte ex immenso mari.*
>
> I visualized you, Lord, surrounding [creation] on all sides and permeating it, but infinite in all directions, as if there was a sea everywhere, and stretching through immense distances, a single sea which had within it a large but finite sponge, and the sponge was in every part filled from the immense sea.[18]

God filled the world not as a liquid filled a receptacle—because this would imply that he was bound by place—but as a spirit filled a human body. Again, he was not contained our bounded in any sense by material creation: God, as the author of *De ordine creaturarum* put it, is 'without location, wholly everywhere'.[19] Only God was characterized by such unbounded omnipresence—other spiritual beings were delimited in some manner—and this uniqueness served to explain God's omnipotence and omniscience. A passage from John Cassian's *Conlationes* provides a useful exploration of what was entailed by God's nowhere-and-everywhere nature:

> *quibus manifeste colligitur nihil esse incorporeum nisi deum solum, et idcirco ipsi tantummodo posse penetrabiles omnes spiritales atque intellectuales esse substantias, eo quod solus et totus et ubique et in omnibus sit, ita ut et cogitationes hominum et internos motus atque adyta mentis uniuersa inspiciat atque perlustret.*
>
> We gather from [Scripture] that there is nothing incorporeal but God alone, and therefore it is only by Him that all spiritual and intellectual substances can be pervaded, because He alone is whole and everywhere and in all things, in such a way as to behold and see the thoughts of men and their inner movements and all the recesses of the soul.[20]

God was the only substance capable of residing in every body in the universe, and it was this very bodilessness, in Cassian's estimation, that allowed God to be omniscient, to 'see the thoughts of men'. The careful ontological distinction between Creator and creation therefore served not only to distinguish the substance and nature of God, but also to explain how God's omnipresence and omnipotence might function within a universe governed by a quasi-Platonic physics.

Bede followed similar lines to his predecessors in describing God. God, in Bede's cosmology, was an inherently singular category of being, distinct from every other thing that existed, all of which were embodied and circumscribed in a way that he was not. Speaking of King Cyrus, Bede wrote:

> *annon luce clarius est quod hunc non corporeum et loco comprehensibilem sed spiritum et ubique praesentem credidit quem ita in hierosolimis et in templo habere locum confessus est ut simul eum caeli regno praesidere non dubitaret.*
>
> is it not clearer than light that he [Cyrus] believed this God to be not corporeal and confinable in terms of place but a spirit and present everywhere? He confessed that God was present in Jerusalem and in the temple and yet did not doubt that he ruled simultaneously in the kingdom of heaven.[21]

This placelessness held true for the Son of God as well: before his incarnation in a human body, Christ was 'not localized' (*non localiter*).[22] Most often, descriptions of God from Bede's corpus use apophatic language to

convey his grandeur. God cannot be apprehended by anyone in this life. The bodily senses, said Bede, cannot hope to perceive God, but they may reach a point where

> *animaduertant diuinae gloriam naturae tantae esse sublimitatis quae nequaquam uideri possit nisi ab his tantum qui a uita uisibili funditus ablati atque ad inuisibilem fuerint introducti.*

> they acknowledge that the glory of the divine nature is of such sublimity, that it can in no way be seen except by those who have been so utterly removed from the visible life and have been brought to the invisible.[23]

In the *Historia ecclesiastica*, Bede described how King Oswiu of Northumbria urged King Sigeberht of the East Saxons to accept the Christian faith; Oswiu explained to Sigeberht that wooden and stone idols could not be gods:

> *Deum potius intellegendum maiestate incomprehensibilem, humanis oculis inuisibilem, omnipotentem, aeternum, qui caelum et terram et humanum genus creasset, regeret et iudicaturus esset orbem in aequitate, cuius sedes aeterna non in uili et caduco metallo sed in caelis esset credenda.*

> rather God must be understood as a being incomprehensible in his grandeur, invisible to human eyes, omnipotent, eternal, the one who created heaven and earth and humankind, who rules over the world and will judge it with justice, and whose dwelling-place, it must be believed, is not in cheap and perishable metal but in the heavens.[24]

Such descriptions of God emphasized his transcendence, but did not lose sight of his presence in the world, sustaining and preserving the movements of nature.

God's governance of creation

This image of divine immanence was hinged on late antique and early medieval ideas regarding being and causation. Christians of all eras have agreed that God is the primary efficient cause of all that is.[25] However, as Ian Wilks has recently phrased it:

> while God's causal input into nature is beyond question for medieval thinkers, what is subject to variation and development is the understanding of how concurrent and ongoing that input is. At one extreme, his causal intervention is constant and ineliminable, and forms the impetus for every change. At the other extreme, his causal intervention is limited to the initial creative act, after which the events of nature are left to unfold according to causal principles with which they are imbued.[26]

The latter view, that a variety of secondary causes intervene between the first cause, God and nature, became the dominant view from the thirteenth century onwards.[27] It led to the idea, first developed by the Scholastics, that phenomena in the world can be divided into those caused directly by God and those caused by 'natural' processes (which owe their original impetus to God but which are a step removed). There has been much debate about when the modern notion of the 'laws of nature' can be said to have come into being,[28] but there can be no doubt that the Scholastic invention of the supernatural was an important step. With primary causal phenomena—the miraculous—quarantined away from secondary causal phenomena, nature could now be studied as *regular* and *predictable* in a way that had not been possible before: 'the quest for secondary causes in nature placed an emphasis on the natural order and its lawful operations'.[29] Or, as another scholar has phrased it, this was 'opening a zone in which the operations of creatures can be understood by natural philosophy, in its own terms'.[30] It became legitimate to study nature according to its own rules, to proceed *as if* God does not intervene in its operation. It is in this spirit that, for instance, Albertus Magnus would seek to differentiate first causes (of divine origin) from 'causes inherent in nature' (*causae naturae insitae*).[31]

In the early medieval world, however, the most common understanding of God's causal relationship with the created world lay in the first of Wilks's two extremes: early medieval theologians saw God's causal intervention as 'constant and ineliminable' and forming 'the impetus for every change'. There is an important distinction to be made between this view of causation—often termed 'Augustinian', after its most widely read proponent—and that of the Scholastic theologians and those who followed them.[32] The Augustinian view of causation was the dominant view in the Latin West from the fifth century until the thirteenth. Augustine emphasized the role of God as the efficient cause of every effect, and was, in the words of Lorraine Daston, 'largely unconcerned with how God brings about these effects, much less with orders of causation'.[33] The Augustinian notion of 'seminal reasons', which I surveyed in Chapter 3, might appear at first somewhat similar to the idea of secondary causes or natural laws. A central difference was that natural laws were understood as being *regular* and therefore *predictable*—in this model, natural laws were *overridden* when something supernatural occurred. But while Augustine's 'seminal reasons' were, in a sense, secondary causes, they were not limited to 'natural' events—for the Augustinian causalist, the seminal reasons were the cause of water being turned into wine and staffs into snakes just as much as more regular occurrences like sunrises and eclipses. Augustine was thus happy to provide what to us look like 'naturalistic' explanations for such events as the eternal fires of hell or the resurrection of the body, because he saw no division between 'natural' and 'supernatural' causation.[34]

Where does this leave Bede? Bede was a proponent of Augustinian causality through-and-through. From this, we should not take it that Bede

thought there was no regularity in nature. Regularity in nature was, in fact, one of the gifts of God, who has 'ordered everything in weight and number and measure' (Wis 11:21).[35] Thus Bede could write at length on the regular movements of the sun, the moon and the stars—an ordered harmony which, as he reminded his readers at the beginning of *De temporum ratione*, was instituted 'by the one true God when he commanded that the stars which he had set in the heavens should be the signs of seasons, days and years'.[36] Such regularity was of course the entire basis for the genre of computus, and indeed the harmony and fixity of the cosmos constituted the very heart of Bede's religious and intellectual worldview.[37] But this regularity was directly dependent on God's continuing creative power—there is no sense in which Bede sought to segregate first causes from those 'causes inherent in nature' as Albertus Magnus would do. To some extent, this difference is an abstract, philosophical one. At most times, Bede was happy to describe nature *as if it were* to all intents and purposes regular. But Bede never lost sight of where this regularity emanated from—not from some secondary causes or laws of nature but from God. Nature was fixed and regular, but this fixity and regularity was contingent on God's continuing creative power; it was to no degree independent.

This extreme vision of God's providence could not but shape Bede's understanding of the events of human history. In the words of Augustine, what pagan philosophers had called 'fate' was in fact 'the will of the most high God, whose power stretches irresistibly forth through all things' (*dei summi uoluntas, cuius potestas insuperabiliter per cuncta porrigitur*).[38] No aspect of Bede's worldview has been more prone to fluctuating opinion than the extent to which he understood God's providence to be at work intelligibly in human affairs. Earlier generations of scholars often ignored or downplayed those statements of Bede's implying providential guidance in worldly affairs.[39] Contemporary scholarship, however, has reconciled itself to this aspect of Bede's thought, and is more likely now to argue that the *Historia ecclesiastica* features 'the presence of a muscular and active Christian God, deeply involved in the affairs of man in general and Englishman in particular', and that the narrative of the *Historia* is 'presented consistently in terms of the unfolding of divine providence'.[40] There can hardly be any doubt that providence was a central part of Bede's vision of history. Historical circumstances, as Bede repeatedly reminded the reader, come about through the 'arrangement of God' (*ordinatio dei*),[41] through the 'dispensation of divine mercy' (*diuinae dispensatio pietatis*)[42] or 'by the action of divine judgement' (*diuino agente iudicio*).[43]

God's minute and precise control was not limited to natural phenomena but extended to the actions of all wills, that is to say humans, demons and angels. The actions of evil spirits, for instance, happened according to God's will. 'God', said Bede, 'employs evil spirits for the testing of some, or for their condemnation, or their correction, or even, in good people, for their preservation'.[44] The angels, meanwhile, being free from the corruption that

mars human psychology and in tune always with true knowledge, 'perfectly adhere to the vision of their Maker'.[45] The activity of humankind too was overseen by the Creator: all human activity was administered by a God who, in the words of Augustine, 'created all and rules over all, who in his goodness makes all things and in his justice governs all wills'.[46] Though this extreme vision of divine providence may seem to imply a lack of free will, Bede, like many of his predecessors, envisioned a co-operation between free will and divine control. He followed the arguments of Augustine in seeing free will as something that can work alongside God's all-encompassing regulation.[47] The thought that God's overweening providence might impinge upon free will, then, is not one that seems to have bothered Bede. God's power was absolute and extended through all created things but this did not excuse humankind from the consequences of their own moral choices. Humans who have sinned have done so through their own free will and bear culpability—but as with the evil spirits, it is clear that God foreknows the outcomes of such choices.[48]

This vision of divine causality—constant and ineliminable—underlies all of Bede's natural philosophy. Again and again in his writings, Bede emphasized the point that God did not cease to govern after the six days of creation and that it is his sustaining power that undergirds all of nature. 'The creator', explained Bede in a Lenten homily, 'did not cease on the seventh day from the work of governing the universe, or even of the annual and daily replacement of begotten things,[49] but only [ceased] from the new establishing of creatures'.[50] As Bede expressed it in *De natura rerum*, the entirety of creation is reliant at all times on God's continuing governing power: God 'created and governs all existing things' (*secula creauit et gubernat*), and he continues to work 'right up to the present' (*usque nunc*).[51] This 'governance' (*gubernatio*) or 'management' (*administratio*) extends from upholding the nature of the cosmos itself right down to the smallest aspect of its functioning: 'God', said Bede, 'even feeds the ravens and clothes the lilies'.[52] Bede's reading of Scripture supported such a view:

> *Vt enim scias deum patrem non primis tantum sex diebus sed usque modo operari lege illud prophetae: prius quam te formarem in utero noui te; et in psalmo: qui fingit singillatim corda eorum; et alibi: qui operit caelum nubibus et parat terrae pluuiam qui producit in montibus faenum; et cetera huiusmodi.*
>
> That you might understand that God the Father works not only on those first six days but right up to the present, read that line of the prophet: 'Before I formed you in the womb, I knew you' (Jer 1:5); and in the psalm: 'He who formed the hearts of every one of them' (Ps 32:15); and elsewhere: 'He who covers the heaven with clouds, and produces rain for the earth, who produces grass to grow on the mountains' (Ps 146:8), and other [passages] in this mode.[53]

Such is the contingent nature of the cosmos according to Bede that, if God were to cease his governance, all of creation would immediately 'fall to pieces' (*dilabi*).[54] This emphasis on God's sustaining presence has often been seen as a particularly Insular trait,[55] but almost all the language used by Bede has parallels in Augustine's *De Genesi ad litteram* and Junillus Africanus's *Instituta regularia diuinae legis*.[56] Augustine, as we have seen, emphasized God's sustaining presence after the six days of creation. Junillus's vision of the cosmos, meanwhile, drew on Augustine's language but also took inspiration from the contemporary empire of Justinian: God, the emperor, governs all of creation through the application of his laws.[57] Junillus's presentation of God as law-giver is particularly important: it is from this text that Bede derived the terminology of God's *gubernatio* that has been seen by some scholars as an echo of the writings of Augustinus Hibernicus and thus a characteristically Insular aspect of Bede's thought.[58] In any case, Bede took Augustine's and Junillus's ideas to heart and his understanding of the workings of divine justice owes more than a little to this tradition, as we shall see.

Divine justice and history

A concomitant of the belief that God controlled all things was the notion that there was a pattern to the trials and troubles of human society and to the ways in which disaster or good fortune befell particular individuals or peoples. But to what end did God administer human history? Was there a moral dimension to these events? Did God, as in the Old Testament narratives, work to punish the wicked and reward the virtuous? These questions preoccupied more than one Christian theologian in late antiquity, and there was little agreement about the answers. For Augustine, it was clear that God did have a purpose in all that he effected in the world; it was equally clear that this purpose was opaque to humankind.[59] In this world, he said, 'there are good people in bad circumstances and bad people in good' (*in malo sunt boni et in bono mali*), and no straightforward link can be drawn between those circumstances and those people's moral standing.[60] True justice will only be eventuated at the final judgement. But it was difficult not to see in some historical events a reflection of human morality and divine judgement on that morality. For those Church historians who attempted to draw out a narrative to events, it was difficult not to fall into a relatively straightforward link between good fortune and merit.[61] Even Augustine noted that 'for the most part, to be sure, bad things happen to the bad and good things to the good' (*uerum etiam plerumque et malis mala eueniunt et bonis bona proueniunt*).[62]

Many scholars have seen in Bede's vision of history a blunt connection between Christian piety and temporal fortune.[63] A selective reading of Bede's historical writings might indeed seem to indicate his adherence to a simple

retributive logic of history, a mechanistic link between the moral standing of persons or peoples and their ultimate temporal fate. The Jewish people; King Herod; Pontius Pilate; and the emperors Aurelian, Gallus, Valerian and Anastasius: all came to grisly ends because of their sins.[64] Nor was Bede subtle in his reading of these deaths as divine judgements—the last mentioned was even struck dead by 'a divine thunderbolt' (*diuinum fulmen*). In Britain, too, sinful kings were stricken by heaven,[65] pious rulers rewarded with military victories and political power, [66] and disobedient monks chastised by miracles.[67] The monastery at Coldingham was destroyed 'due to the wickedness of those who dwelt there' (*a malitia inhabitantium in eo*).[68] The Britons were punished for their 'unspeakable crimes' (*inenarrabilia scelera*) and especially because they did not proselytize the *Angli*.[69] The monks of Iona—who *had* spread the faith to their neighbours—were brought to a more correct Easter reckoning through 'the dispensation of divine providence' (*diuinae dispensatio prouisionis*).[70] Yet this pattern was by no means universal. In the *Historia ecclesiastica*, there are numerous people whose unfortunate fate is not linked to justice or retribution: though many holy men and women were saved by providence from temporal death because of their piety, others suffered martyrdom,[71] painful disease[72] or death in battle.[73] A world in which some people receive their just deserts and some do not is ultimately just as capricious as one in which no one does. What then is the point of such temporal punishments and rewards?

One goal of such divine punishments has been identified by Paul Hilliard in an insightful recent study on prosperity and adversity in the *Historia ecclesiastica*.[74] Hilliard argues that, in Bede's vision of history, the divinely orchestrated punishment of a sinner was not an end in itself. Rather, 'Bede construed punishment and adversity sent by God as a call for sinners to repent, to amend their ways'.[75] This 'pedagogical dimension' of Bede's conception of history is central if we are to understand Bede's presentation of events in his historical writing.[76] From where did Bede derive this understanding of providence? Numerous streams of Christian thought provide analogues. I would like to call attention to one. In the *Instituta* of Junillus Africanus (a central influence as we have seen on Bede's understanding of divine governance) an analogy is drawn between God's laws and the laws of the emperor—this analogy suggested to Junillus a reason for those punishments endured by humankind. Punishment, in Roman legal tradition, was seen to function as both a retributive penalizing of the offender and a lesson for both the offender and others.[77] As Augustine put it, criminals ought to be punished 'so that either he who is chastised may be corrected by his experience, or others may be warned by his example'.[78] According to Junillus, 'present punishments and rewards' (*poenas et praemia praesentia*) are properly thought of as the Divine Law because these very punishments and rewards 'are the things which instruct in place of the law' (*sunt quae ad uicem legis erudiunt*): 'for future and eternal [punishments and rewards] will benefit neither those suffering nor those perceiving, when there will

no longer be time for repentance'.[79] God, like a good emperor, governs his subjects with one eye to their restitution. That the purpose of divine punishments might be corrective or restitutive rather than simply punitive was spelled out by Bede in his commentary on Ezra and Nehemiah. There, he explained how the adversities of the present life serve to teach. When one member of the Church falls into sin, he explained, many others are frightened by their example and are therefore more careful in their own piety. Often, those same sinners, because of this lapse, go on to bear 'greater fruits of good work' (*maiores bonorum operum fructus*) than they did before the sin.[80] God's punishments served a punitive role but they also served to deter others from committing the same crime or to chastise and correct the criminal. The corrective function of punishment is clear, for instance, in Bede's retelling of the story of a group of monks punished by God for disobeying Cuthbert. These monks came to recognize that God's purpose in this miracle was to 'correct' (*corrigere*) their errors.[81]

There were further ways to interpret the adversities of the world beyond punishment or correction. The Old Testament, particularly the Book of Job, suggested that God might seek to 'test' even the most irreproachable of people. Affliction by demons, to take one example, could be interpreted as a straightforward rehabilitative punishment—as in the case of King Eadbald who was afflicted with demonic possession in order to 'castigate' (*castigare*) and 'correct' (*corrigere*) him for his apostasy[82]—but Bede knew that God used evil spirits to a wide variety of ends: for 'testing' (*probatio*), for 'condemnation' (*damnatio*), for 'correction' (*correctio*) or even for the 'preservation' (*conseruatio*) of good people.[83] Only one of these ends is purely punitive. Even relatively everyday natural phenomena ought also to be understood as chastisements from God, according to Bede. In his commentary on Ezra-Nehemiah, he implied that divine admonishment should be deduced whenever the weather turns sour,

> *turbatis licet elementis et uel uentorum fragore uel inundantia pluuiarum uel niuium aceruis uel ardore siccitatis uel etiam exitio hominum siue animalium desuper ingrauescente atque ipso iudice per aperta indicia uim suae irae minitante.*
>
> when the elements are stirred up and weather deteriorates into violent winds, floods of rain, heavy snowstorms, parching drought or even the death of men and animals, and when the judge himself threatens the force of his anger through open signs.[84]

This strand of Bede's thought chimed with his understanding of the nature of the postlapsarian world at large. The inherent adversity and hardship of this temporal world was partly punitive (as punishment for the sin of Adam), but it also served to chastise and to teach. Nature was adulterated, not so that the earth itself might be punished, said Bede, but 'so that it should put the crime of human sin always before men's eyes, whereby they should from

time to time be reminded to turn away from sins and toward the commands of God'.[85] By the same token, God left reminders of the perfection of Eden in the world 'in order to urge us through a nearby example to deserve its restoration' (*ad promerendum eius reditum de uicino nos admoneret exemplo*).[86] There was then in Bede's worldview a sense of every aspect of this present life as useful and potentially edifying.

Of course, he also recognized that despite this ultimately hopeful vision of life's misfortunes the complexity and seeming 'evils' of the world could be challenging, even for the most devout. Some of Bede's most revealing theodical statements come in a little-studied work, a commentary on the Canticle of Habakkuk, written some time before 731.[87] Habakkuk was alarmed, said Bede, at the 'transitory happiness of the wicked' (*felicitas transitoria malorum*) and the 'temporal suffering of the good' (*temporalis adflictio bonorum*).[88] He saw in the world around him evidence of unfairness and injustice:

> *uiderat pacem peccatorum et adflictiones proborum; uiderat impios abundare diuitiis, et innocentes cotidianis subiectos esse flagellis; uiderat in loco iudicii impietatem, et in loco iustitiae iniquitatem; uiderat lacrimas innocentum, et consolatorem neminem, nec posse resistere calumniatorum uiolentiae cunctorum auxilio destitutos.*
>
> he had seen the prosperity of sinners (Ps 72:3) and the afflictions of the righteous (Eccl 2.26?); he had seen the wicked abounding in riches (Ps 72:12) and the innocent subjected daily to the whip (Ps 72:13–14?); he had seen in the place of judgement wickedness, and in the place of justice iniquity (Eccl 3:16); he had seen the tears of the innocent and they had no one to comfort them, nor could they resist the violence of their oppressors, being destitute of help from any (Eccl 4:1).[89]

Only after contemplating God's plan for the world (centred on the Incarnation and Passion) did Habakkuk realize that the suffering of this life is unimportant as the saints have been promised eternal rest in the life to come.[90] In the prologue to *De templo*, composed *c.*731 and likely dedicated to Acca of Hexham,[91] Bede again stressed perseverance in the face of earthly tribulations. He asked Acca to have patience,

> *patientiam uidelicet ut ea quae occurrerint aduersa mente humili ac submissa quasi a iusto iudice et pio patre inrogata flagella toleremus siue ad uirtutum gloriam augmentumque meritorum si iusti et innocentes feriamur seu ad correptionem morum si uitiis impliciti.*
>
> patience, that is, to bear with an attitude of humble submission the adversities that befall us as punishments imposed by a just judge and compassionate father whether for the enhancement of our virtue and increase of merit, should we be punished, even though upright and innocent, or for the correction of our conduct should we be enmeshed in vice.[92]

What lies at the heart of Bede's theodicy is an understanding that the complexity of this world precludes any simple link between virtue and reward. He recognized that one person's gain in this world could often come at someone else's expense. Yet he also believed that seeming hardship could often lead to a greater good. There are numerous examples of such thinking in Bede's writings. He wrote that the proliferation of heresies in the Church, for instance, resulted in the creation of many 'splendid treatises on Holy Scripture' (*magnifici in sanctam scripturam tractatus*) by Athanasius, Ambrose, Hilary, Augustine and others.[93] Here, again, Bede hewed close to Augustine's understanding—indeed, the idea that heresies have such a benefit derives from Augustine's *Enarrationes in Psalmos*.[94] Even events that were primarily punitive—such as the punishment of mankind for building the Tower of Babel—served further ends. Said Bede:

> *ablata est potestas linguae superbis principibus, ne in contemptum dei subditos possent quae coeperant mala docere. Sicque iudicium diuinae seueritatis in adiutorium humanae uersum est utilitatis, ut tacendo cessarent ab opere, cui peruerse loquendo congregati insistebant.*
>
> the power of language was taken from the proud rulers [of Babel] lest in contempt of God they might be able to teach their subjects the evils that they had begun. And thus the judgement of divine severity was transformed into an aid for the benefit of mankind, in that being silent the rulers ceased from the work that they were perversely engaged in when they were united by speech.[95]

Bede's vision of divine justice in the temporal world was thus of a complex overlay of ends and means: events could be intended by God to serve more than one purpose. However, Bede did seem to imply that, while some righteous men such as Job have suffered adversity in the past, suffering is *in general* a result of a divinely orchestrated justice: in his preface to Acca he wrote that while it is true that *some* blameless figures (such as Job) have suffered, 'we, on the other hand, are more often chastised for our transgressions by the merciful providence of our creator'.[96] Elsewhere, he made similar statements. 'Many persons', he wrote in his commentary on the Seven Catholic Epistles, 'on account of sins committed in the soul are struck with sickness or even death of the body'.[97] These kinds of statements speak to a belief that punishment often works itself out in the present. We see the results of this in the *Historia*: God's purposes may be obscure, Bede seems to say, but some events are too clearly punitive to be read in any other way. There is no objective way of separating the affliction of Eadbald from the ill health suffered by Hild. The former was a bad king—his affliction was clearly a punishment for sin—the latter a holy woman—her illness must have been a test, something from which she emerged, like Job, even more steadfast. Bede's vision of providence was thus an elastic one, allowing him to account for great catastrophes like Ecgfrith's death or Coldingham's destruction, while

at the same time leaving room for the important Augustinian conceit that God's will is inscrutable and that ultimate justice will only be meted out in the hereafter.

Sign and allegory in Bede's cosmos

Bede's histories are full of punishments and rewards, as we have seen, but they are also full of providential events which are not directly punitive or even corrective, but instead serve as messages, symbols, allegories. In the late ancient and early medieval world, this type of vision of natural and historical symbolism proliferated.[98] The tombs and relics of saints were particularly prone to such readings: blooming roses and sublime odours at the tombs of the holy dead were symbols of the ineffable.[99] In the writings of Gregory the Great, Gregory of Tours, Adomnán and many other historians and hagiographers of the period, we see reflected a view of reality as a complex system of metaphors and signs.[100] For late ancient thinkers, God communicates with Christians *through* the world, and anything in the universe has the potential to be a sign from God. Bede held to this view as well. The metaphor of the 'book of nature' was not used by Bede,[101] but there is nevertheless some truth to the idea that Bede read the world like he would a text, capable of revealing hidden messages from God. The simplest way in which this was true was in the sense that *creation* symbolized *creator*—that the existence of a created world indicated the existence of God.[102] But the symbols of the created world could function in other ways. Where the author of a work of literature might employ a metaphor to speak of something else, the author of the created world could also create events or narratives that symbolized a different reality to the literal surface reality. In the words of Calvin Kendall:

> The physical universe was metaphoric; images like fire, water, tempest, harvest, poison, famine, light, dark, and plague, were realities in the physical world and figures as well. In the final analysis, no distinction could be drawn between verbal metaphors and physical signs, since physical signs were the metaphors by means of which God communicated with man.[103]

God 'speaks' through events, and he speaks in metaphors.

The clearest example of this kind of thought is found in the realm of exegesis of sacred history. It was a central tenet of Christian belief that the Bible—and the Old Testament in particular—was full of prophecy, symbol and allegory. Biblical allegory could be delivered in one of two ways: it could be 'in words' (*allegoria in uerbis*), such as the words spoken or written by a prophet; or it could be 'in that which was done' (*in factis*), in the actual historical events recorded in Scripture. This latter kind of allegory implied that the world could function as a text, that real events or things could stand as

metaphors or symbols. Eric Auerbach, in an influential essay, defined an allegory of this kind as 'something real and historical which announces something else that is also real and historical'.[104] The events, circumstances and personages of sacred history were allegories of future events, or of moral or spiritual matters: as many as four different levels of sense could be derived from a biblical allegory. An allegory, said Bede, whether it was allegory 'in word' (*in uerbis*) or 'in deeds' (*in operis*), might represent:

1 Something historical (*historica res*);
2 Something typological (*typica res*);
3 Something tropological (*tropologica res*), that is to say a 'moral rule' (*morale ratio*);
4 Something anagogical (*anagoge res*), that is, something 'leading the mind to higher things' (*sensum ad superiora ducens*).[105]

Bede's interpretation of historical allegories was mostly focussed on sacred history. Importantly, however, it was not just the details recorded in Scripture that were receptive to being interpreted in this manner. Bede's most characteristic subject of exegesis—Solomon's Temple—can stand as an example of his general technique.[106] Bede's exegesis of the Temple combined solid, historical fact with far-ranging allegorical interpretation of its meaning. Indeed, precise measurements and an eye for minor details about the physical building were what allowed him to construct his complex allegorical Temple image—the Temple had to be, in Alan Thacker's words, a 'viable material object' before it could become the foundation of a detailed allegorical edifice.[107] Such is the centrality of the historical building—rather than the words of Scripture—to Bede's exegesis that he could offer allegorical interpretation of aspects of the Temple that he had drawn from non-scriptural sources. As I have shown elsewhere, Bede provided allegorical interpretations of the 72 pomegranates and bells on the tunic of the high priest, the great hall and the crowds who would gather there and the white walls of the Temple—yet these were details about the Temple derived not from Scripture but from extra-biblical sources, particularly the first-century Jewish historian Josephus.[108] It was not the case, as some scholars have argued,[109] that Bede limited his allegorical readings to the words of Scripture alone—he was interested in interpreting the historical reality that lay behind the biblical narrative.

The fourfold model of biblical allegory did not apply quite so well to contemporary events. Bede mostly presented the history of the *Angli*, for instance, as a *fulfilment* of prophecy not as a period that was itself ripe with signs and prophecies: the end of the world—the culmination of all history—was coming, and Britain—one of the 'multitude of isles' (Ps 96:1)—played a central part in this prophesied period of world history.[110] Moreover, the crux of history, the Incarnation of Christ, had already happened, and it would not make sense to look for typological meaning (that is, related to the life

of Christ) in contemporary *signa*. Yet a fundamental part of Bede's vision of recent history as presented in his *historiae* and *uitae* was that the world was arranged in such a way that patterns and symbols lay hidden just beneath the surface of events—and that these communicated spiritual, moral and theological information if one only knew how to read them correctly.[111] The exemplary and exhortatory punishments of Bede's *historiae*, discussed above, functioned as tropological signs as well as chastisements—they were lessons in how to behave and how not to behave. Other natural signs were more straightforward. Natural beauty, for instance, was a clear indicator of the presence of holiness or even martyrdom. The small hill on which Alban was martyred had 'long been rendered worthy' (*dignum olim reddens*), on account of 'the innate splendour of its beauty' (*pro insita sibi specie uenustatis*), to be consecrated by the blood of a martyr.[112] On another occasion a Briton was travelling past the location of a battle in which the holy King Oswald had been killed when he noticed a particular area 'greener and more beautiful than the rest of the plain' (*cetero campo uiridius ac uenustius*). The traveller 'with a perceptive mind, inferred that there could be no other cause of such unaccustomed beauty in that place other than that some man holier than the rest of the army had been killed there'.[113] He was, of course, correct. Natural Edens were, as Bede said in his commentary on Genesis, a reminder to humanity of what they had lost but they were also a symbol of the promised return to paradise and the ability of the saints to bring a taste of that paradise to earth.[114] The metaphorical meaning of an event was not always subtle: when Wilfrid converted the South Saxons, the accompanying cessation of a three-year drought in the kingdom served as a metaphor for the natives' spiritual transformation.[115]

Providential events might serve to symbolize something much more specific. That the monks of Wearmouth happened to be singing Psalm 82 in church at the exact moment of Benedict Biscop's death was a sign of the indomitability of that abbot's soul, as Bede explained:

> *Cuius totus hoc resonat textus quod inimici nominis Christi siue carnales siue spiritales semper ecclesiam Christi, semper animam quamque fidelem disperdere ac dissipare conentur; sed e contra ipsi confusi et conturbati sint perituri in saeculum … Vnde recte dabatur intellegi caelitus dispensatum, ut talis diceretur psalmus ea hora qua exiret de corpore anima, cui iuuante Domino nullus praeualere posset inimicus.*
>
> The whole thrust of this text [Psalm 82] is that the enemies of the name of Christ, whether fleshly or spiritual, may strive always to lay waste the Church of Christ and also to ruin every faithful soul, but on the contrary are themselves defeated and overthrown, and are destined to perish at the end of the age … From which it was rightly thought to have been the arrangement of heaven that such a psalm should be said at the hour when his soul departed from his body, a soul that with God's help no enemy could overcome.[116]

Even the names given to peoples or places could serve as *allegoriae*: King Oswald won a famous victory at a site called 'Heavenfield' (*Hefenfelth* or *Caelestis campus*), a name which, according to Bede,

> *certo utique praesagio futurorum antiquitus . . . accepit; significans nimirum, quod ibidem caeleste erigendum tropaeum, caelestis inchoanda uictoria, caelestia usque hodie forent miracula celebranda.*
>
> it certainly received in days of old as an omen of future happenings; it signified that a heavenly sign was to be erected there, a heavenly victory won, and that heavenly miracles were to take place there continuing to this day.[117]

The famous tale of Gregory the Great's encounter with the *Angli* slave-boys in Rome followed a similar logic: as David Orsbon has recently phrased it, the all-encompassing influence of God in historical events is such that 'the words *Angli*, *Ælle* and *Deiri* always contained providential significance, although their import remained latent, because God's order is universal and absolute'.[118]

Perhaps the most prominent category of events-that-stand-for-something-else in Bede's narrative writings are those signs that foreshadow Judgement Day.[119] In Book 4 of the *Historia ecclesiastica*, St. Chad explained how inclement and threatening weather ought to be understood:

> *Mouet enim aera Dominus, uentos excitat, iaculatur fulgora, de caelo intonat, ut terrigenas ad timendum se suscitet, ut corda eorum in memoriam futuri iudicii reuocet, ut superbiam eorum dissipet et conturbet audaciam, reducto ad mentem tremendo illo tempore, quando ipse caelis ac terris ardentibus uenturus est in nubibus, in potestate magna et maiestate, ad iudicandos uiuos et mortuos.*
>
> For the Lord moves the air, raises the winds, hurls lightning, and thunders forth from heaven so as to rouse inhabitants of the world to fear him, to call them to remember the future judgment in order that He may scatter their pride and confound their boldness by bringing to their minds that dread time when he will come in the clouds in great power and majesty, to judge the living and the dead, while the heavens and the earth are aflame.[120]

Chad thus made it his priority to drop what he was doing and start praying whenever the weather turns sour.[121] Note that in Chad's explication of the purpose of storms, it is implied that they serve a dual role, both straightforward chastisement and eschatological prefiguration—the two meanings are not always easily untangled from one another. Another common eschatological sign was the rainbow. As Bede explained in his commentary on Genesis, the rainbow was a *signum* of the destruction wreaked by the Flood and of God's covenant not to send another such deluge—but it was also a

harbinger of the end of the world. 'If it be properly considered' (*si bene consideretur)*, he advised, the rainbow

> *futuri iudicii quod per ignem est mundo futurum … signum nobis ante oculos praetendit. Neque enim frustra ceruleo simul et rubicundo colore resplendet, nisi quia ceruleo colore aquarum quae praeterierunt, rubicundo flammarum quae uenturae sunt nobis testimonium perhibet.*
>
> also sets before our eyes a sign of the future judgement which will come upon the world by fire. For not without reason does it gleam blue and red at the same time, since by the colour blue it bears witness to us of the waters that have gone past, and by the colour red, of the flames that are to come.[122]

The natural world was full of apocalyptic messages of coming destruction but also more hopeful ones. The miracles of healing performed by the saints were prefigurations, according to Bede, of the future life of the elect in heaven, at which time God would decisively cure 'the sicknesses of our hearts and bodies' (*cordis et corporis nostri languores*).[123]

Bede's particular vision of God's creative power—constant and sustaining, containing the world but not contained by it—allowed him to conceive of a cosmos that might at first appear internally inconsistent: the world was *regular* and *ordered* (not through any merit of its own but because God instituted this regularity at creation), but at the same time, events occurred not according to the detached logic of 'natural causes' (or any other such later medieval or early modern concept) but according to a kind of poetic causation.[124] A skein of symbolism ran through the created world, and—unlike in later centuries when miracles would be segregated from events with natural causes—this symbolism was to be found in the everyday as well as the marvellous. It is here that Bede's view of things well and truly diverges from any modern scientific cosmology. The notion that 'the universe is trying to tell me something' is antithetical to the modern scientist, but it was central to Bede's view of reality.

Conclusion

As with the subject of the soul, Bede's express adherence to tradition on the subject of God and God's creative power may tempt us to pass over this area of his thought without examination. But that would be a mistake. It is not possible to sever Bede's understanding of the physics and mechanics of the world from his conception of the Creator of that world. For Bede, the hand of God lay concealed behind every thunderstorm, every chance event, every single human action or movement of nature. The entirety of Bede's enquiry into the natural world pointed inexorably to God—for him, the cosmos was a theophany. It is worth reiterating that this does not mean that Bede had no concept of regularity in nature. We should not think of Bede's cosmos as a

kind of unregulated and confusing cacophony, a tale told by an idiot. There was in fact a very profound logic to it.

Nevertheless, this view of God and causation has an important impact on the question of whether Bede can be called a 'scientist' in the modern sense. If a central pillar of the modern scientific method is that the operation of nature can be reduced to a small number of fundamental laws, then Bede's understanding of God's role in the continuing realization of creation necessarily precludes such a view. Not only that, but the corollary of his understanding—that nature unfolds according to a poetic mode of causation, that the world is shot through with allegorical meaning—does not fit with modern scientific image of nature either. Bede's account of the natural causes of rainbows has drawn admiring comments from modern scholars[125]—but Bede also believed that rainbows were caused by God, and that they were messages to humankind.[126] The divine was deeply enmeshed in the cosmos: the mechanisms of the world could not be separated out into natural causation and supernatural intervention. If the modern cosmos is in some senses 'meaningless', Bede's cosmos was overflowing with meaning.

Notes

1 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192).

2 D.A. Crosby, *The Specter of the Absurd: Sources and Criticisms of Modern Nihilism* (Albany, NY, 1988); D. Storey, 'Nihilism, Nature, and the Collapse of the Cosmos', *Cosmos and History: The Journal of Natural and Social Philosophy* 7 (2011), 6–25; for the roots of cosmic nihilism in late medieval nominalism, see M.A. Gillespie, *Nihilism Before Nietzsche* (Chicago, 1996).

3 Crosby, *The Specter of the Absurd*, 27.

4 Overviews of the development of Christian Trinitarianism can be found in: Pelikan, *Christian Tradition*, I, 172–225; L. Ayres, *Nicaea and Its Legacy: An Approach to Fourth-Century Trinitarian Theology* (Oxford, 2004); G. Emery and M. Levering (eds), *The Oxford Handbook of the Trinity* (Oxford, 2011).

5 On the origins of the *filioque* see A.E. Siecienski, *The Filioque: History of a Doctrinal Controversy* (Oxford, 2010). This 'double procession' was accepted by Bede.

6 Bede, *HE* 4.17 (ed. Lapidge, SC 490, 280).

7 D.L. Paulsen, 'Early Christian Belief in a Corporeal Deity: Origen and Augustine as Reluctant Witnesses', *Harvard Theological Review* 83 (1990), 105–16.

8 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 44; trans. Kendall, 110): 'spiritus enim est deus nec simplex eius substantia liniamentis membrorum corporalium esse composita nisi ab ineruditis creditur'.

9 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 9; trans. Kendall, 74): 'apud deum purus intellectus est sine strepitu et diuersitate linguarum'.

10 See D. Carabine, *The Unknown God: Negative Theology in the Platonic Tradition: Plato to Eriugena* (Louvain, 1995).

11 Bede, *HE* 2.10 (ed. Lapidge, SC 489, 338): 'Licet summae diuinitatis potentia humanae locutionis officiis explanari non ualeat, quippe quae sui magnitudine ita inuisibili atque inuestigabili aeternitate consistit'.

12 Carabine, *The Unknown God*; C.M. Stang, 'Negative Theology from Gregory of Nyssa to Dionysius the Areopagite', in J.A. Lamm (ed.), *The Wiley-Blackwell Companion to Christian Mysticism* (Chichester, 2013), 161–76.

13 Prestige, *God in Patristic Thought*, 4–14; Funkenstein, *Theology and the Scientific Imagination*, 23ff.; Carabine, *The Unknown God*; L. Sweeney, *Divine Infinity in Greek and Medieval Thought* (New York, 1992), esp. 473–537; G. Stroumsa, 'The Incorporeality of God: Context and Implications of Origen's Position', *Religion* 13 (1983), 345–58; Blowers, *Drama of the Divine Economy*, passim.

14 See above, 95.

15 Gavrilyuk, 'The Incorporeality of the Soul in Patristic Thought', 8.

16 S.J. Grabowski, 'God "Contains" the Universe: A Study in Patristic Theology', *Revue de l'Université d'Ottawa* 26 (1956), 90–113; Blowers, *Drama of the Divine Economy*, 79–81.

17 Grabowski, 'God "Contains" the Universe', 97.

18 Augustine, *Confessio* 7.5 (ed. Verheijen, CCSL 27, 96; trans. Chadwick, 115).

19 *DOC* 1.1 (ed. Díaz y Díaz, 84): 'sine loco, ubique totus'.

20 Cassian, *Conlationes* vii.13 (ed. Petschenig, CSEL 13, 192–3; trans. Gibson, 367).

21 Bede, *In Ez*. 1.225–8 (ed. Hurst, CCSL 119A, 246; trans. DeGregorio, 15).

22 Bede, *Hom*. 1.6 (ed. Hurst, CCSL 122, 43).

23 Bede, *In Cant*. 4.6.4 (ed. Hurst, CCSL 119B, 303; trans. DeGregorio, 'The Venerable Bede on Prayer and Contemplation', 31). On the transcendence and ineffability of God as reflected in Bede's approach to prayer and contemplation, see DeGregorio, 'The Venerable Bede on Prayer and Contemplation', 31–2.

24 Bede, *HE* 3.22 (ed. Lapidge, SC 490, 120)

25 For efficient causation, see the essays in T.M. Schmaltz (ed.), *Efficient Causation: A History* (Oxford, 2014). For definitions of the four 'Aristotelian causes' see M. Hocutt, 'Aristotle's Four Becauses', *Philosophy* 49 (1974), 385–99; M. Frede, 'The Original Notion of Cause', in J. Barnes, M.F. Burnyeat and M. Schofield (eds), *Doubt and Dogmatism: Studies in Hellenistic Epistemology* (Oxford, 1980), 217–49.

26 I. Wilks, 'Efficient Causation in Late Antiquity and the Earlier Medieval Era', in T.M. Schmaltz (ed.), *Efficient Causation: A History* (Oxford, 2014), 83–104, at 93.

27 On this point see L. Daston, 'Marvelous Facts and Miraculous Evidence in Early Modern Europe', *Critical Inquiry* 18 (1991), 93–124, at 95–9; R. Bartlett, *The Natural and the Supernatural in the Middle Ages* (Cambridge, 2008), 12–13; H. de Lubac, *Surnaturel: études historiques* (Paris, 1946), 371–3; J.-L. Solère, 'The Ancient and Medieval Concept of Nature', in N.H. Gregersen, M.W.S. Parsons and C. Wassermann (eds), *The Concept of Nature in Science and Theology, Part I* (Geneva, 1997), 40–5.

28 J.E. Ruby, 'The Origins of Scientific "Law"', *Journal of the History of Ideas* 47 (1986), 341–59; D. Lehoux, 'Laws of Nature and Natural Laws', *Studies in History and Philosophy of Science* 37 (2006), 527–49.

29 Grant, *The Foundations of Modern Science in the Middle Ages*, 22.

30 Colish, *Peter Lombard*, 283.

31 Albertus Magnus, *De caelo et mundo* 1.4.10 (ed. Geyer, 103); E. Grant, *God and Reason in the Middle Ages* (Cambridge, 2001), 193–4.

32 Bartlett, *The Natural and the Supernatural*, 12–13; E. Ahern, 'Bede's Miracles Reconsidered', *Early Medieval Europe* 26 (2018), 1–22; Daston, 'Marvelous Facts and Miraculous Evidence', 95–9.

33 Daston, 'Marvelous Facts and Miraculous Evidence', 97.

34 I hope to explore this further in a forthcoming article, 'Augustine's Peacock: The Appeal to Natural Lore in Late Antiquity'.

35 For the connection between this passage of Scripture and the regularity of computus, and for other language meant to evoke the stability of God's cosmos, see Wallis, 'Caedmon's Created World'; 102–4 and passim. Cf. Wallis, '"Number Mystique" in Early Medieval Computus Texts', in T. Koetsier and L. Bergmans (eds), *Mathematics and the Divine: A Historical Study* (Amsterdam, 2005), 181–99.

36 Bede, *DTR* (ed. Jones, CCSL 123B, 275; trans. Wallis, 14): 'ab uno uero deo … quando sideribus caelo inditis praecepit ut sint in signa et tempora et dies et annos'.
37 Wallis, 'Si naturam quaeras'; Wallis, 'Caedmon's Created World'.
38 Augustine, *DCD* 5.8 (ed. Dombart and Kalb, CCSL 47, 135; trans. Dyson, 197).
39 B. Colgrave, 'Bede's Miracle Stories', in A.H. Thompson (ed.), *Bede: His Life, Times and Writings: Essays in Commemoration of the Twelfth Centenary of His Death* (Oxford, 1935), 201–29.
40 Higham, *(Re-)Reading Bede*, 148, 149.
41 *DTR* 66 (ed. Jones, CCSL 123B, 495; trans. Wallis, 195).
42 *HE* 5.22 (ed. Lapidge, SC 491, 168).
43 *HE* 2.2 (ed. Lapidge, SC 489, 186).
44 Bede, *In Sam.* 3 (ed. Hurst, CCSL 119, 144; trans. DeGregorio and Love, 260): 'utitur enim deus etiam malis spiritibus ad probationem quorundam uel damnationem uel correctionem uel etiam in bonis conseruationem'.
45 Bede, *De tab.* 1.527–9 (ed. Hurst, CCSL 119A, 18): 'perfecte … uisioni sui conditoris adhaerent'.
46 Augustine, *DGAL* 8.9 (ed. Zycha, CSEL 28.1, 245): 'qui condidit omnia et regit omnia, omnes naturas bonus creat, omnes uoluntates iustus ordinat'.
47 Delmulle, 'Le florilège augustinien de Bède le Vénérable et les discussions tardoantiques sur la grâce, le libre arbitre et la prédestination', *Revue d'études augustiniennes et patristiques* 62 (2016), 265–92. Augustine's main discussion appears in his *De gratia et libero arbitrio* (PL 44) and *DCD* 5 (ed. Dombart and Kalb, CCSL 47).
48 A conclusion that has seemed unsatisfactory to some. There is a large body of work by philosophers and theologians responding to Augustine's theories of free will. See, for instance, D.P. Hunt, 'On Augustine's Way Out', *Faith and Philosophy* 16 (1999), 3–26; E. Stump, 'Augustine on Free Will', in E. Stump and N. Kretzmann (eds), *The Cambridge Companion to Augustine* (Cambridge, 2001), 124–47.
49 In other words, things that reproduce: humans, animals and plants.
50 Bede, *Hom.* 1.23 (ed. Hurst, CCSL 122, 167): 'conditor in die septima non ab opere mundanae gubernationis et annuae immo cotidianae rerum creatarum substitutionis sed a noua creaturarum institutione cessauit'. Cf. Junillus Africanus, *Instituta regularia diuinae legis* 2.2.12 (ed. Collins).
51 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192; trans. Kendall and Wallis, 74).
52 Bede, *DNR* 1 (ed. Jones, CCSL 123A, 192; trans. Kendall and Wallis, 74): 'etiam coruos pascit et lilia uestit deus'.
53 Bede, *Hom.* 1.23 (ed. Hurst, CCSL 122, 167).
54 Bede *IG* 1.2 (ed. Jones, CCSL 118A, 35). Cf. Augustine, *DGAL* 4.12 (ed. Zycha, CSEL 28.1, 108).
55 Stancliffe, 'Creator and Creation'.
56 See above, Chapter 2, 44–5, for the influence of Junillus on Bede.
57 Once again, it would be tempting to read such references to laws as a foreshadowing of the modern idea of 'natural laws', but Junillus's cosmological vision was Augustinian—he saw all such laws as emanating directly from God (as scholars of legal history have pointed out, the vision of law in this period—as something emanating from the ruler—was very different to the version that appeared in the early modern world—in which the law was something that could stand independently; there are close parallels here with the way in which the analogy of natural law changed over the centuries).
58 Above, 45–5.
59 G.W. Trompf, 'Augustine's Historical Theodicy: The Logic of Retribution in *De Civitate Dei*', in G.W. Clarke et al. (eds), *Reading the Past in Late Antiquity* (Rushcutters Bay, NSW, 1990); T.E. Mommsen, 'St. Augustine and the

Christian Idea of Progress', *Journal of the History of Ideas* 12 (1951), 346–74; R.A. Markus, *Saeculum: History and Society in the Theology of St Augustine* (Cambridge, 1970).

60 Augustine, *DCD* 20.2 (ed. Dombart and Kalb, CCSL 48, 701).

61 R.M. Grant, *Eusebius as Church Historian* (Oxford, 1980); M. Humphries, 'Rufinus's Eusebius: Translation, Continuation, and Edition in the Latin *Ecclesiastical History*', *JECS* 16 (2008), 143–64, at 158–61; G.W. Trompf, *Early Christian Historiography: Narratives of Retributive Justice* (London, 2000).

62 Augustine, *DCD* 20.2 (ed. Dombart and Kalb, CCSL 48, 701). P. Barnes, 'Augustine's View of History in his *City of God*', *The Reformed Theological Review* 71 (2012), 90–108.

63 For instance, L.W. Barnard, 'Bede and Eusebius as Church Historians', in G. Bonner (ed.), *Famulus Christi: Essays in Commemoration of the Thirteenth Centenary of the Birth of the Venerable Bede* (London, 1976), 106–24; J. Campbell, 'Bede'.

64 The Jews: Bede, *DTR* 66 (ed. Jones, CCSL 123B, 500); Bede, *In canticum Abacuc* 3.13 (ed. Hudson, CCSL 119B, 399); Herod: *DTR* 66 (ed. Jones, CCSL 123B, 495); cf. Jerome, *Chronicon* (ed. Helm, 170); Pilate: Bede, *DTR* 66 (ed. Jones, CCSL 123B, 496–7); cf. Orosius, *Historiae* 7.5.8 (ed. Arnaud-Lindet, III, 27); Aurelian: *DTR* 66 (ed. Jones, CCSL 123B, 506); cf. Jerome, *Chr.* (Helm, 223); Gallus: Bede, *DTR* 66 (ed. Jones, CCSL 123B, 505); cf. Rufinus, *HE* 7.1 (ed. Mommsen, 637); Bede, *DTR* 66 (ed. Jones, CCSL 123B, 505); cf. Orosius 7.22.4–5 (ed. Arnaud-Lindet, III, 57–8); Anastasius: Bede, *DTR* 66 (ed. Jones, CCSL 123B, 520).

65 Eadbald: *HE* 2.5 (ed. Lapidge, SC 489, 314); Ecgfrith: Bede, *HE* 4.24 (ed. Lapidge, SC 490, 350–2); Osric and Eanfrith: *HE* 3.1 (ed. Lapidge, SC 490, 14–16).

66 Oswald: *HE* 3.2 (ed. Lapidge, SC 490, 18–20); *HE* 3.6 (ed. Lapidge, SC 490, 42); Cenwealh: *HE* 3.7 (ed. Lapidge, SC 490, 50–2).

67 Bede, *VCP* 36 (ed. Colgrave, 266–70).

68 *HE* 4.23 (ed. Lapidge, SC 490, 342).

69 *HE* 1.22 (ed. Lapidge, SC 489, 192); *HE* 1.14 (ed. Lapidge, SC 489, 158–62); *HE* 5.22 (ed. Lapidge, SC 491, 168). The theme has been explored in N. Howe, *Migration and Mythmaking in Anglo-Saxon England* (New Haven, CT, 1989); R.W. Hanning, *The Vision of History in Early Britain: From Gildas to Geoffrey of Monmouth* (New York, 1966), 70–90; N.J. Higham, *An English Empire: Bede and the Early Anglo-Saxon Kings* (Manchester, 1995), 31–40; Thacker, 'Bede and the Ordering of Understanding', 56–7; J. O'Reilly, 'Introduction', in *Bede: On the Temple*, xxxiv–xxxix.

70 *HE* 5.22 (ed. Lapidge, SC 491, 168).

71 *HE* 1.7 (ed. Lapidge, SC 489, 132–40).

72 *HE* 4.21 (ed. Lapidge, SC 490, 326).

73 *HE* 2.20; 3.18 (ed. Lapidge, SC 489, 394–6; SC 490, 98–100).

74 P. Hilliard, '*Quae res Quem sit Habitura Finem, Posterior Aetas Videbit*: Prosperity, Adversity and Bede's Hope for the Future of Northumbria', in P. Darby and F. Wallis (eds), *Bede and the Future* (Farnham, 2014), 181–205.

75 Hilliard, 'Prosperity, Adversity', 194.

76 Hilliard, 'Prosperity, Adversity', 194.

77 R.A. Bauman, *Crime and Punishment in Ancient Rome* (London, 1996); G. Watson, 'Crime and Punishment in Augustine and the Philosophical Tradition', *The Maynooth Review / Revieú Mhá Nuad* 8 (1983), 32–42.

78 Augustine, *DCD* 19.16 (ed. Dombart and Kalb, CCSL 48, 683; trans. Dyson, 945): 'ut aut ipse qui plectitur corrigatur experimento, aut alii terreantur exemplo'.

79 Junillus Africanus, *Instituta regularia diuinae legis* 2.7.2 (ed. and trans. Collins): 'nam futura et aeterna nec patientibus nec uidentibus proderunt, ubi iam paenitentiae non erit tempus'.
80 Bede, *In Ez.* 3.1521 (ed. Hurst, CCSL 119A, 377).
81 Bede, *VCP* 36 (ed. Colgrave, 270).
82 Bede, *HE* 2.5 (ed. Lapidge, SC 489, 314).
83 Bede, *In Sam*. 3.16 (ed. Hurst, CCSL 119, 144).
84 Bede, *In Ez*. 2.1796–800 (ed. Hurst, CCSL 119A, 332; trans. DeGregorio, 146); Ahern, 'Bede's Miracles Reconsidered', 289–90; McCready, *Signs of Sanctity*, 25–7; Wallis, 'Si Naturam Quaeras', 94; Plummer, *Venerabilis Baedae Opera Historica*, II, 209; cf. Bede, *HE* 4.3 (ed. Lapidge, SC 490, 216), discussed below, 167.
85 Bede, *IG* 1.3 (ed. Jones, CCSL 118A, 68; trans. Kendall, 135): 'ut peccati humani crimen semper hominibus ante oculos poneret, quo admonerentur aliquando auerti a peccatis et ad dei precepta conuerti'.
86 Bede, *IG* 1.2 (ed. Jones, CCSL, 118A, 48; trans. Kendall, 113–14).
87 Scully, 'Introduction', 19.
88 Bede, *In canticum Abacuc* 3.2 (ed. Hudson, CCSL 119B, 384; trans. Connolly, 69). For discussion of this commentary, see B. Ward, '"In medium duorum animalium": Bede and Jerome on the Canticle of Habakkuk', *Studia Patristica* 25 (1993), 189–93.
89 Bede, *In canticum Abacuc* lines 9–14 (ed. Hudson, CCSL 119B, 381). This section is an intricate palimpsest of scriptural and patristic allusion. Bede created an original list of worldly injustices by weaving together quotations from the Psalms and Ecclesiastes (as indicated in parentheses above). He was possibly inspired by similar biblically inspired passages questioning the world's injustices; Augustine, for instance, had said something similar in *Enarrationes in Psalmos* 83 (ed. Dekkers and Fraipont, CCSL 39, 1161): 'you see riches in the hands of robbers, the impious, the criminals; in the hands of the dissolute and the wicked you see riches' (*vides diuitias apud latrones, apud impios, apud sceleratos, apud turpes; apud flagitiosos et facinorosos uides diuitias*).
90 Bede, *In canticum Abacuc* lines 23–31 (ed. Hudson, CCSL 119B, 382).
91 P. Darby, 'Bede, Iconoclasm and the Temple of Solomon', *Early Medieval Europe* 21 (2013), 390–421, at 396–7.
92 Bede, *De templo* lines 5–11 (ed. Hurst, CCSL 119A, 143; trans. Connolly, 1).
93 Bede, *In Ez.* 3.1528 (ed. Hurst, CCSL 119A, 377).
94 Augustine, *Enarrationes in Psalmos* 9.20 (ed. Dekkers and Fraipont, CCSL 38, 68).
95 Bede, *IG* 3.11 (ed. Jones, CCSL 118A, 156; trans. Kendall, 231).
96 Bede, *De templo* (ed. Hurst, CCSL 199A, 144).
97 Bede, *In epistulas septem catholicas* 1.5 (ed. Hurst, CCSL 121, 221; trans. Hurst, 62): 'Multi propter peccata in anima facta infirmitate aut etiam morte plectuntur corporis'.
98 G.B. Ladner, 'Medieval and Modern Understanding of Symbolism: A Comparison', *Speculum* 54 (1979), 223–56.
99 As detailed in P. Brown, *The Cult of the Saints: Its Rise and Function in Latin Christianity* (Chicago, 1981); G. De Nie, *Views from a Many-Windowed Tower: Studies of Imagination in the Works of Gregory of Tours*, Studies in Classical Antiquity 7 (Amsterdam, 1987).
100 De Nie, *Views from a Many-Windowed Tower*, passim; Straw, *Gregory the Great*, 48–50; O'Loughlin, *Adomnán and the Holy Places*, 22–3, 117–18.
101 Though he would have read it in, for instance, Augustine, *Contra Faustum* 32.20 (ed. Zycha, CSEL 25, 782).
102 The idea that the entirety of creation stood as a symbol, in this sense of its Creator, was present in Scripture: Paul spoke of how the 'invisible things of

[God] have been clear to see since the creation of the world, being understood by means of those things that were made; so too his eternal power and divinity' (Rom 1:20). The order and createdness of the world stood as testament to God's existence. This idea lies behind Augustine's account of his seeking after God, in which he sought divinity in the natural world; Augustine, *Confessio* 10.6.9 (ed. Verheijen, CCSL 27, 159): 'I asked the whole frame of the universe about my God and it answered me: "I am not He, but He made me"'; 'interrogaui mundi molem de deo meo, et respondit mihi: "non ego sum, sed ipse me fecit"'. In this sense, then, most Christians of the last two millennia have agreed that the created world 'speaks', in a sense, of its Creator. This was the meaning that the metaphor of the 'book of nature' would hold in the seventeenth century.

103 C.B. Kendall, 'Bede's *Historia ecclesiastica*: The Rhetoric of Faith', in J.J. Murphy (ed.), *Medieval Eloquence: Studies in the Theory Practice of Medieval Rhetoric* (Berkeley, 1978), 145–72, at 162–3.

104 E. Auerbach, 'Figura', trans. Ralph Manheim, in *Scenes from the Drama of European Literature* (Manchester, 1984), 11–76, at 29. Or as Charles W. Jones put it, 'history is typified, not by words, but by history' (Jones, 'Some Introductory Remarks', 134).

105 Bede, *DSET* 2.2 (ed. Kendall, 196).

106 On Bede's allegorical readings of the Temple, and the Tabernacle, see: O'Reilly, 'Introduction', in *Bede: On the Temple*, xvii–lv; Scully, 'Introduction', in *Bede: On the Tabernacle*, xiii–xxvi; DeGregorio, *Bede: On Ezra and Nehemiah*, xiii–xliv; O'Brien, *Bede's Temple: An Image and Its Interpretation* (Oxford, 2015).

107 Thacker, *Bede and Augustine*, 24.

108 Ahern, 'Bede's Miracles Reconsidered', 296–8.

109 A.G. Holder, 'Allegory and History in Bede's Interpretation of Sacred Architecture', *American Benedictine Review* 40 (1989), 115–31.

110 O'Reilly, 'The Multitude of Isles and the Corner-stone: Topography, Exegesis, and the Identity of the *Angli* in Bede's *Historia Ecclesiastica*'.

111 For an extended version of this argument, see Ahern, 'Bede's Miracles Reconsidered', 293–302.

112 Bede, *HE* 1.7 (ed. Lapidge, SC 489, 138).

113 Bede, *HE* 3.10 (ed. Lapidge, SC 490, 62): 'coepitque sagaci animo conicere, quod nulla esset alia causa insolitae illo in loco uiriditatis, nisi quia ibidem sanctior cetero exercitu uir aliquis fuisset interfectus'.

114 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 48; trans. Kendall, 113–4).

115 Bede, *HE* 4.13 (ed. Lapidge, SC 490, 262).

116 Bede, *HA* 14 (ed. Grocock and Wood, 54; trans. Grocock and Wood, 55).

117 Bede, *HE* 3.2 (ed. Lapidge, SC 490, 20; trans. Colgrave and Mynors, 217).

118 D.A. Orsbon, 'Bede's Sacred Order: Schemes and Tropes in the *Historia Ecclesiastica*', *The American Benedictine Review* 62 (2011), 3–26, 125–42, at 134.

119 Darby, *Bede and the End of Time*, 95–124.

120 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 216; trans. Colgrave and Mynors, 343–5).

121 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 214).

122 Bede, *IG* 2.9 (ed. Jones, CCSL 118A, 135; trans. Kendall, 208). On the notion that the Flood's destruction by water was a prefiguration of the Apocalypse's destruction by fire, see below, Chapter 8, 221–4.

123 Bede, *VCP* 46 (ed. Colgrave, 306).

124 The phrase is borrowed from De Nie, *Views from a Many-Windowed Tower*, 69.

125 Eckenrode, 'Bede as Scientist', 496–7.

126 Bede, *IG* 2.9 (ed. Jones, CCSL 118A, 135).

7 Heaven, hell and the interim

Christian doctrine held that the ultimate fate of every individual would be decided on the Day of Judgement. On that day, Christ would divide humanity into the elect and the damned: the former group would spend eternity in heaven, the latter would be condemned to hell. This basic tenet of Christian belief left open a particular set of questions. What happened to souls in the interim between their individual deaths and the Day of Judgement? Would some particularly saintly individuals go directly to heaven? Would some sinners go straight to hell? The topic of this chapter has been the focus of no little attention in recent years, centred in the main on the topic of 'the birth of purgatory', a line of research opened by Jacques Le Goff in an influential but flawed study of 1981.[1] According to Le Goff, the idea of purgatory was an innovation of the twelfth century, when the term *purgatorium* was first coined. By focussing on the emergence of this very specific terminological criterion, however, Le Goff underplayed beliefs about afterlife purgation in earlier centuries.[2] More recently, a variety of studies have explored the idea of 'the interim' in late antiquity and the middle ages.[3] These have shown that the late antique and early medieval world was home to a vibrant and diverse set of beliefs regarding the fate of souls after death but that it was widely accepted that there existed an interim place—or places—for souls who were neither in heaven nor hell. These studies have tended to single Bede out as a particularly important thinker on the subject—the person who provided the 'crucial formulation of purgatory's theology'.[4]

Bede, it is agreed, was the first to delineate a *fourfold* division of souls at death—and the first to actually describe the interim realms in which these groups were held to reside. According to Bede's novel model, the very wicked went straight to hell; the saints and martyrs went straight to heaven; those whose sins were not quite great enough to damn them to hell were purified in a purgatorial realm, similar to hell in some respects; and those not quite saintly enough to be sent straight to heaven resided in a kind of waiting area outside heaven (what Ananya Kabir has termed the 'interim paradise').[5] The arresting story of Dryhthelm's voyage to the afterlife, related by Bede in Book 5 of the *Historia ecclesiastica*, has drawn particular attention,[6] though it has too often been approached as a standalone text divorced from

the context of Bede's wider thought. More recently, a number of scholars have profitably approached the Dryhthelm narrative in conjunction with Bede's theological writings, particularly an advent homily in which Bede laid out his understanding of the fate of souls at death.[7] In his approach to the afterlife, as in so many other areas of knowledge, Bede offered a creative synthesis of what he found in his sources. In the process, he outlined a specific model of the afterlife that had been long implied but never before vocalized. In order to examine this act of synthesis, we must first begin with a brief exploration of ideas about the afterlife in the centuries before Bede.

Heaven and hell before Bede

Scriptural and early Christian traditions of the afterlife were confused and often contradictory.[8] Indeed, the faithful of the first few centuries CE were not overly concerned with the fate of souls in the interim, given the imagined proximity of the eschaton. Notions of immediate post-mortem reward were latent in Scripture, however: a number of New Testament passages seemed to imply that, immediately after death, souls would be reunited with Christ in heaven (Luke 16:19–31, 23:43; Phil 1:22–3; 2 Cor 5:1–10). Gradually, the concept developed that, at the moment of death, the souls of the dead were sent straight to heaven or hell, or were brought to some kind of waiting area where they would await the resurrection of their bodies and the final judgement.[9] The specifics of this arrangement—unsupported as it was by any explicit scriptural explanations—would be subject to interpretation and reinterpretation over the course of Christianity's first millennium.

The very holy dead, it was generally agreed, must *already* be in heaven. 'It is clearly evident', wrote Gregory the Great, 'that the souls of the perfect and the just are received into the heavenly dwelling as soon as they leave the prison of this flesh'.[10] Where was this 'heavenly dwelling'? By the fourth century, Christian thinkers in the Latin West were happy to imagine heaven as somewhat analogous to the Aristotelian *aether*: it was a non-corporeal, unchanging and eternal realm, set above the sphere of the fixed stars.[11] Questions about heaven's location and spatial quality were discussed by Christian theologians. According to the main strand of Neoplatonic thought, there was *nothing* beyond the boundaries of the physical world. But Christians held that Christ, in his corporeal body, had ascended to heaven, a credo that proved difficult to square for those—like Augustine—with essentially Neoplatonic views of the cosmos.[12] Most of the thinkers who followed him, however, had little problem with the idea that heaven was possessed of a certain spatial—or at least *locational*—quality.[13]

Meanwhile, hell and its torments—sparsely described in Scripture—were eagerly expanded upon in Christian writings.[14] A number of scriptural passages indicated the presence of fires in hell (Matt 13:50, 25:41; Mark 9:43; Rev 19:20). These fires were interpreted by many early commentators in a spiritual sense, as the consciousness of sins that torments the soul.[15] Others,

however, argued for the reality of a corporeal hell. Augustine drew on his knowledge of natural philosophy in order to argue that a corporeal hell was not impossible: the fact that many animals, like the Salamander, could live in fire unharmed; that the flesh of peacocks does not putrefy after death; that the fires of some volcanoes have always been burning and seem likely to continue doing so: all of these facts demonstrated that the concept of an eternal, corporeal hell was not inconsistent with nature.[16] He also held that the fire of hell was capable of tormenting demons, despite its corporeality, either because demons are possessed of airy 'bodies', or because the flames will have the ability to inflict pain even on incorporeal forms.[17] Gregory the Great went further than Augustine by stating categorically that the flames of hell tormented both body and soul.[18] In the seventh century, *De ordine creaturarum* included hell in its gazetteer of the cosmos and reported that 'many have said' (*multi dixerunt*) that hell is a corporeal place.[19]

The idea that hell was located beneath the earth was supported by a number of different traditions, both biblical and otherwise. In particular, certain New Testament passages (1 Pet 3:19–20, 4:6; Ephes 4:9) depicted Christ descending into the earth to preach to the dead. The late-fourth-century commentary on the Apostles' Creed by Rufinus represents an important shift: where Christ had previously been spoken of as descending to 'the dead' (*inferos*), he was now said to have descended to 'hell' (*inferna*).[20] The idea that hell was a location to which one could descend was therefore well established in Christian theology, and to many late antique Christians, hell slotted readily into the Neoplatonic cosmos. Despite some early scepticism, Augustine accepted the idea that hell was located under the earth.[21] Philippus Presbyter, writing in the 390s, made a claim for hell's subterranean location based on his reading of Job 26:5, which asserted that the giants and their compatriots groaned 'under the waters' (*sub aquis*): 'hell is below the earth', he argued, 'in the same way that the earth is below the water, just as it is said: "who created the waters above the earth"'.[22] This logic was followed by the author of *De ordine creaturarum*, who added the evidence of Isaiah 14:11 and Revelation 5:3–5: 'from which is clearly shown that that place, whatever kind it is, which is called the lower hell and the land of oblivion, is below the earth'.[23] The author of another seventh-century Irish work known to Bede, the *Commemoratorium de Apocalypsi Iohannis apostoli*, commented that those 'under the earth' (Rev 5:13) referred to the 'inhabitants of hell' (*habitatores inferni*).[24] The writings of Gregory the Great, meanwhile, instigated a number of popular traditions about the geography of hell. Gregory stated that he was careful not to make any definite statements about the location of hell: 'on this matter', he explained, 'I do not dare to rashly assert anything'.[25] Despite this caveat, he went on to discuss the idea in a way that makes clear he was quite amenable to the possibility of it being under the earth, concluding that he could see no impediment to this opinion.[26] Gregory offered further conjecture in his *Dialogi*, where he explained that the numerous volcanic openings around Sicily (of which Mt. Etna is the most

famous) should be understood as entrances to hell. The fact that such openings were becoming bigger, 'as those who know are in the habit of telling us' (*ut solent narrare qui nouerunt*), must mean that these entrances were expanding in order to accommodate the growing number of damned souls.[27] Elsewhere in the *Dialogi*, Gregory recounted a hermit's vision in which the Gothic king Theoderic was thrown into a volcano (located in the Lipari islands, north of Sicily) by the spirits of Pope John and Symmachus the Senator. Gregory's depiction of such entrances was widely influential: during Bede's lifetime, for instance, a Southumbrian traveller would go out of his way to visit the Lipari islands in order to see the famous site of 'Theoderic's hell' (*infernus Theodrichi*).[28]

Even as traditions of heaven and hell began to crystallize, theologians continued to debate the fate of those souls who did not go directly to hell or to heaven. Where did these souls reside in the interim between death and the Day of Judgement? Catholic doctrine would eventually settle on the idea that there existed one place of interim waiting: 'purgatory'. Long before that, however, there existed a general understanding of some kind of division of souls into different groupings at death.[29] Augustine, for instance, believed that there were three divisions of souls at death: the good, the bad and those 'neither so good' (*nec tam bonus*) as the first category 'nor so bad' (*nec tam malus*) as the second.[30] A similar middle grouping of souls was understood by Gregory, who was of the opinion that some souls were 'delayed' (*differre*) just outside heaven 'in certain dwellings' (*in quibusdam mansionibus*), 'as they did not quite possess that perfect righteousness'.[31] *De ordine creaturarum*, likewise, presented a threefold division of souls at death.[32] No writer before Bede's time explicitly suggested a fourfold division of souls at death, but it *was* generally agreed that there would be a fourfold division of souls on the Day of Judgement. The middle category of souls who had not been sent to heaven or to hell would at that stage be judged and divided into two groups: one destined for heaven, the other for hell.[33]

Where might these different categories of souls be housed in the interim? Scripture suggested a number of possibilities, such as the 'paradise' promised to the good thief (Luke 23:43) or the 'bosom of Abraham' into which the poor man Lazarus was welcomed (Luke 16:22–3). In late antique exegesis, these two locations were sometimes conflated, sometimes distinguished from one another. Augustine suggested that the paradise of the good thief was not heaven, but a region for the repose of souls, equivalent to the bosom of Abraham and located in a region of hell; when Christ 'descended to hell', therefore, he was in fact descending to this region in order to free the patriarchs.[34] The term 'paradise' implied a possible equivalence with the terrestrial paradise of Adam or with heaven itself. Many early theologians, indeed, did not distinguish between the paradise of the good thief and the paradise of Adam.[35] In later centuries, however, a clear division between the two would be agreed upon. Isidore, for instance, differentiated between the 'terrestrial paradise' (*terrenus paradisus*), where Adam and Eve dwelt,

and the 'heavenly paradise' (*caelestis paradisus*), where the souls of the blessed are transported as soon as they leave their bodies.[36] This idea was repeated in Julian of Toledo's influential *Prognosticon*.[37] *De ordine creaturarum* provided the most explicit discussion of how this interim paradise might fit into the classical-Christian schema of the cosmos. The author (in an excursus that they freely admitted was a reflection of their own educated guesswork) connected the celestial paradise—where the souls of the blessed await the future resurrection—with the 'higher space' (*spatium superius*), i.e. the upper part of the *aer*.[38] They further specified that this interim paradise was the same paradise as that promised by Jesus to the good thief. Notably, despite the fact that it was explicitly differentiated from the terrestrial Eden, this paradise was still imagined as a physical garden, 'planted with trees and distinguished by a shining spring' (*arboribus consitus et lucido fonte praepollens*).[39]

By Bede's day, then, the notion that there existed a place in which souls awaited the Day of Judgement, but which was neither heaven nor hell, was well established. Also firmly established was the idea that souls would be cleansed of minor sins by a purificatory fire before their entrance into heaven.[40] Augustine, drawing on 1 Corinthians 3:15, suggested that some of the faithful would be saved 'by a certain purging fire' (*per ignem quendam purgatorium*),[41] while Gregory spoke rather more authoritatively of a 'purgative fire before judgement' (*ante iudicium purgatorius ignis*).[42] These fires, however, were generally understood as a feature of the end-time sequence, not as something associated with any proto-purgatorial interim location.[43] At the same time, the Church as an institution was developing ideas about post-mortem almsgiving that would have a profound effect on conceptions about the fate of the soul.[44] It had long been accepted that prayers and almsgiving might be effective in providing reprieve for souls in the afterlife. A letter of Jerome suggested that *others* might give alms on behalf of a dead person.[45] After that, the idea that such alms would be effective in releasing souls *currently in torment* was perhaps an inevitable development. As Marilyn Dunn has argued, an episode in Gregory's *Dialogi* may be the earliest example of such an idea.[46] From Bede's point of view, however, even earlier narratives, such as the *Passio Perpetuae et Felicitatis*—which narrates how Perpetua's brother was freed from a post-mortem torment by her prayers—would have seemed to imply the same thing, whatever their original intentions.[47]

It is clear from the *Historia ecclesiastica* and contemporary sources that masses for the release of souls from torment were an accepted and uncontroversial feature of the ecclesiastical fabric of the day.[48] Yet, for Bede as for Augustine, this release could *not* be a release from hell itself—that was ruled out by the fact that hell was eternal (Matt 25:46) and inescapable (Luke 16:26).[49] The difficulties inherent in talking about release through alms and masses are nicely illustrated by an early Northumbrian Saint's Life—the anonymous *Vita Gregorii papae* from Whitby. That work retold

a story from Gregory's *Dialogi* about a man whose soul was released from post-mortem torment. The anonymous Whitby author described how Gregory took pity on the dead man and through his prayers freed him from 'hell' (*infernus*).[50] In the original version of the story, Gregory had *not* specified that the man was held in hell, and, as Marilyn Dunn notes, the view that a soul could be released from hell in this way in fact contradicts Gregory's own theological discussion of hell in the *Dialogi* and the *Moralia*.[51] This then was the problem: if hell was to be kept as an inescapable place, yet alms and masses were to be understood as delivering souls from torment, *where* were such tormented souls to be conceived of as residing? In hindsight, there is an apparent inevitability to Bede's invention of a realm of purgative punishment—but to assume this would be to lend too defined an outline to early medieval beliefs about the afterlife. As the *Vita Gregorii* attests, there were numerous ways in which the vague statements of Scripture regarding the afterlife could be interpreted.

The development of Bede's fourfold afterlife schema

Bede, then, inherited a tradition regarding the interim that was consistent about some questions, contradictory about others. He would have to wrestle with questions regarding the exact number of afterlife realms, the meaning of terms like *paradisus* and *sinus Abrahae*, and the relation of such theological categories to the popular stories of soul journeys and the doctrine of prayer for the dead.

One particular work authored by Bede—his advent homily, in which he divided the dead into four categories—has drawn much attention and deservedly so: it represents the mature thoughts of a theologian who had spent his life thinking about his subject.[52] Among Bede's writings from earlier in his career, however, we find many statements about the rest of the soul after death that are worth exploring—and from which it is clear that his thinking about the interim rest changed significantly over the course of his lifetime. A favourite theme of Bede's—and one that changed and developed over the years—was the scheme of the seven or eight ages of the world.[53] According to that model of history, contemporary events were taking place in the sixth (and last) age of the world. At the same time, the seventh age, prefigured by the day of rest in creation week, was already underway—as Bede wrote in his commentary on Luke, dated to the 710s, the seventh age represents the rest of souls 'in another life' (*in alia uita*),[54] the interim rest of souls. Both the sixth age and the seventh will come to an end when the eighth age begins—this age represents the period after the Day of Judgement, when the faithful will enjoy eternal life with God in the reborn universe. Bede was sometimes unclear about whether the seventh age referred to those already in heaven or those in an interim zone or both. In *In Genesim*, certainly, Bede seems to have equated the seventh age straightforwardly with the kingdom of heaven. The seventh age, he wrote in that work, is an 'age of eternal repose' (*aetas*

perpetuae quietis), in which 'God rests with his saints forever' (*irequiescit deus cum sanctis suis in aeternum*). This age began, said Bede, when the first martyr, Abel, was killed, and his soul immediately entered 'the joy of eternal life' (*gaudium uitae perennis*). It is the same as the place where the rich man saw the poor man resting—in other words the *sinus Abrahae* of Luke 16:22–23. When the world ends 'this same sabbath' (*ipse sabbatismus*) will be given to the freshly reborn bodies.[55] In this model, in other words, a number of different afterlife realms are rolled into one.

It seems clear, however, that this simple explanation of the afterlife was deemed insufficient by Bede in later years. After all, how could Abel be in heaven, if he was not a baptized Christian? An interim paradise *distinct from* heaven was needed in order to explain what happened to the righteous who died before Christ's Incarnation (in other words, the patriarchs and other holy people of the Old Testament). In a homily, Bede discussed the problem. Scripture, as he noted, was very clear that 'unless a man shall be reborn of water and the Spirit, he cannot enter the kingdom of God' (John 3:5) and he interpreted this to mean that someone like Abel would be unable to enter the gate of heaven. Such people could be admitted, however, to 'a blessed rest after death in the bosom of Abraham' (*in sinu abrahae post mortem beata requies*), where they 'awaited with blissful hope their entry into heavenly peace' (*supernae pacis ingressum spe felici expectabant*).[56] He made the same point in his *Retractatio in Actus apostolorum*. When Christ descended to the dead, he liberated the patriarchs 'from the regions of hell' (*a locis infernorum*) and now they reside in the bosom of Abraham—'not yet' (*necdum*), as Bede put it, in the kingdom of heaven, because they were not baptized, but 'in the consolation of a separate rest' (*in consolatione secretae quietis*).[57] These works come relatively late in Bede's career (as far as can be established)[58] and appear to represent a shift away from the simpler model of *In Genesim*, in which there was no differentiation between heaven and the rest of the patriarchs.

Another insight into Bede's early conception of how souls might be divided at death can be found in his commentary on 1 Peter, written probably in the years after 709. In that work, he described a threefold division of people: those who are righteous and suffer, and thereby imitate Christ; those who are corrected by misfortune, and thereby imitate the good thief, who 'after the cross entered paradise with Christ' (*post crucem paradisum cum Christo intrauit*); and those who are not corrected, like the bad thief, who rushed into 'tartarus' (i.e. hell).[59] This threefold division, while in keeping with many of the statements of Christian fathers like Augustine and Jerome, would eventually be deemed an unsatisfactory model by Bede.

By the time he came to write his advent homily, Bede had settled on a fourfold division of souls at death, and he gave a clear account of this fourfold model in that work. Firstly, he noted, the apostles, martyrs, confessors and others who have led a faultless life are certainly with Christ in heaven. Secondly, there are 'the just' (*iusti*), who 'are received immediately into the

blessed rest of paradise (*paradisus*), waiting in great joy among great choruses of fellow rejoicers for the time when, having recovered their corporal bodies, they may come and appear before the face of God'.[60] Thirdly, there are those who did good works but who, because of some evil deeds, are sent to 'the flames of the purgatorial fire' (*flammae ignis purgatorii*). These either stay in this punishment until the Day of Judgement or, if enough prayer and almsgiving has been made for them, they might come earlier than that to the 'rest of the blessed' (*beatorum requies*).[61] The fate of an unmentioned fourth category—the damned—hardly needed to be spelled out. This fourfold model represents a development of Bede's earlier threefold division. It adds a fourth realm, a fiery purgatorial one, an addition that had the advantage of explaining how there could be souls in torment but not in hell. Though it was for Bede something of an afterthought, it was this 'purgatory' that would come to dominate the afterlife in the thought of the later middle ages.

This schema—so precisely detailed in the advent homily—is also to be found in a narrative context, in the story of Dryhthelm's voyage to the afterlife in Book 5 of the *Historia ecclesiastica*, completed in 731.[62] After his death, Dryhthelm was led by an angelic guide to a valley in which souls underwent torments reminiscent of hell. Indeed, Dryhthelm believed it to be hell at first, but his guide preempted him: 'This is not in fact hell, as you suppose'.[63] They then arrived at (but did not enter) a great fiery pit, in which more souls were being tormented and into which some evil spirits were leading some unfortunate human souls. After this, the angel brought Dryhthelm to a bright and flowery plain atop a high wall, where white-clad residents enjoyed an arcadian bliss. Dryhthelm began to think that this plain must be heaven, but his guide once again preempted him: 'this is not the kingdom of heaven as you reckon'.[64] They then passed beyond this space and approached an area from which emanated an even greater light, an even sweeter fragrance and the sound of singing. Unfortunately, before Dryhthelm was able to reach this place, the guide stopped him and led him back to the flowery plain. He then explained to Dryhthelm all that he had seen. The valley of heat and cold was the place of restitution for those souls who did not confess or make restitution for their sins until they were on the point of death; because they did repent, however, they will enter heaven on Judgement Day—or even before, through 'the prayers, alms and fasting of the living and especially the celebration of masses'.[65] The flaming pit was the mouth of hell, 'from which anyone who once falls in will never in eternity be freed'.[66] The flowery plain was the residence of those spirits who died practising good deeds but who were not perfect enough to be allowed into heaven immediately; at Judgement Day they will be received into the kingdom of heaven. The area of light and fragrance, from which came sweet singing, was the kingdom of heaven, where reside those who had been perfect in every word and deed and thought. Those same four realms that had been indexed rather dryly in Bede's homily were brought to life with vivid detail in the story of Dryhthelm's voyage. The two texts agree in every

particular about the details of the interim. Together, they paint a picture of a fully realized model of the afterlife.

The Dryhthelm narrative also served an important didactic role: teaching Christians about the wages of sin and the relief that prayer and almsgiving can bring to souls in the afterlife. In this sense, it is of a piece with another episode from the *Historia ecclesiastica* in which the power of prayer for the dead was foregrounded. In Book 4, Bede recounted the story of a priest, Tunna, who offered masses on behalf of his brother, Imma. Imma was thought to have died in battle, but he was in reality a captive. At the exact moment that mass was said for him, Imma's chains were loosened. As Imma explained to his astonished captor, 'if I were now in the next life, there my soul through his intercessions would be loosened from punishments'.[67] The implication of this episode is that such masses are effective in releasing souls currently undergoing such punishments—a development of almsgiving as portrayed by Jerome and Augustine, but one consistent with its portrayal in the Gregorian *Dialogi*. Bede made mention of masses for the dead elsewhere in the *Historia ecclesiastica*—it is clear that they were part of the fabric of his world. His novel fourfold afterlife schema, with its not-quite-hell from which souls could be released, had the advantage of working this important aspect of eighth-century Church doctrine into the topography of the afterlife.

Worth noting here too is Bede's depiction of the fires of judgement observed by Fursa on his voyage, as recounted elsewhere in the *Historia ecclesiastica*.[68] A comparison of this narrative with Dryhthelm's voyage reveals an important fact: Bede had decided on a clear-cut distinction between the purgative fires of the interim and the fires at the end of time. When he spoke of the purgative hell, therefore, he was not thinking of a simple extension of the eschatological fires backwards in time, as Augustine had been in his famous passage.[69] Rather, he had divorced the two fires entirely from one another. This change was a freeing one. It allowed Bede to deal with the two traditions separately and not to get bogged down in the inconsistencies that had developed around the concept of post-mortem fires.

Bede's schema of the afterlife, then, was an elegant solution to a body of problems that had accumulated around the topic of death and the afterlife. By imagining a fourfold division of souls at death, which included a purgative hell from which souls could be released, he had invented a useful device with which to reconcile a host of overlapping but inconsistent traditions about almsgiving, the harrowing of hell, purgative fire and the interim rest.

The afterlife realms in cosmic context

How did the four afterlife realms envisioned by Bede fit into the cosmographical schema outlined in *De natura rerum*? As we have seen in previous chapters, late antique and early medieval thinkers conceived of spiritual matter not in a Cartesian sense, as something without extension in space, but as something that was at least quasi-spatial. Bede was no different in

this regard: although heaven, hell and other such regions were shrouded in mystery—indeed, were inherently unknowable to the living—they were still, in theory, mappable, traversable and (in some senses) physical realms.

The most detailed account of the afterlife anywhere in Bede's writings is found in the narrative recounted in the *Historia ecclesiastica* of Dryhthelm's post-mortem soul journey. In order to be in a position to extract the information we need from this narrative, however, we must engage with some complicated questions about the nature of its composition and the role that Bede had in shaping it. For that reason, I will leave aside consideration of the details of Dryhthelm's story until the following section. For now, let us consider the information about the afterlife presented by Bede elsewhere in his writings.

Heaven

Bede included in his commentary on Genesis some considerations of the formation of heaven (though he believed that Moses, the author of the Book of Genesis, had purposefully avoided talking too much about the spiritual heaven, 'believing that he should describe the corporeal, visible, and corruptible creation more extensively in due order').[70] On the first day of creation, according to Genesis, God had formed the heaven and the earth—in other words, said Bede, the *caelum superius* and the *mundus*, respectively. After this, 'the earth was void and empty, and darkness was upon the face of the deep' (Gen. I.2): as Bede explained, Scripture was referring here to the primordial conditions in the *mundus*, but not in the higher heaven (*caelum superius*) which, 'having been kept distinct from every condition of this mutable world, remains forever undisturbed in the glory of the divine presence'.[71] The *caelum superius*, said Bede, came into being immediately at God's first moment of creation. It is eternal, completely untouched by the vicissitudes and advancing senescence of the temporal world below. Unlike the *mundus*, it was filled with light immediately upon its creation.[72] Like the patristics, Bede saw light as the natural state of heaven. God Himself, wrote Bede, is 'true light' (*uera lux*) and inhabits 'inaccessible light' (*lucem inaccessibilis*), 'the most blessed sight of which the angels in the heaven of heavens had begun to enjoy immediately as they were created'.[73] Darkness, the absence of light, is an attribute of the fallen, murky, corporeal world only. *De temporum ratione* repeated much of this information, though it included one additional observation in the form of an aphoristic statement that drew heavily on the pseudo-Clementine *Recognitiones*: God first created the 'invisible heaven' (*inuisibile caelum*; i.e. the *caelum superius*) and then the 'visible heaven' (*uisibile caelum*; i.e. the *mundus*), the first to serve as 'a home for the angels' (*habitaculum angelis*), the second as a home for men (*habitaculum hominibus*).[74]

Bede touched upon the topic of the topography of heaven in a number of works. In *De natura rerum* he explained that the *caelum superius* was located

above the firmament and the waters of the firmament.[75] In Bede's vision, these waters represent the uppermost part of 'corporeal' creation—the *caelum superius*, located immediately above them, is an entirely spiritual realm, separated from all corporeal concerns. Bede gave occasional hints elsewhere in his writings about his understanding of the celestial structure. Modern translations can often smooth out references to medieval cosmological terms; we must bear in mind that a phrase like 'above the stars' (*super astra*)—often deployed by Bede to refer to heaven—is no simple poetic commonplace.[76] Though it has the ring of metaphor to modern ears, it is an image that tallies perfectly with Bede's vision of the universe. Indeed, some of Bede's interpretations of Scripture only make sense if one assumes that he took literally the idea that heaven was above the stars.[77]

There are revealing statements about heaven to be found in Bede's various discussions of the Ascension, a favourite topic of his and the subject of one of his surviving hymns.[78] It was a central tenet of Christian belief that Christ had ascended to heaven, where he now resided bodily at the right hand of the father,[79] and this event had long provided Christian theologians with a peg on which to hang discussion of celestial topography. Gregory the Great, for instance, had spent some time in a homily discussing the difference between the ascension of Christ and that of Elijah: Elijah, argued Gregory, was only brought to the 'airy heaven' (*caelum aerium*), not heaven proper.[80] Bede would draw on the arguments of Gregory and others, but he would do so with a precision of language lacking in the patristic interpretations. This precision makes it clear that he was thinking about Christ's Ascension in terms of the cosmos laid out in *De natura rerum*. Christ was lifted, wrote Bede, 'not only above the whole space of the *aer*' (*non solum super uniuersa aeris huius spatia*) but 'even above all the height of the *aether*' (*sed etiam super omnem aetheris altitudinem*), before taking his place at the right hand of God.[81] Comparison with the ascensions of Enoch and Elijah provided a chance to expand further. Bede was aided in this by the fact that he was using the Septuagint translation of the Book of Kings, which specifies that Elijah ascended '*as if* into heaven' (*quasi usque in caelum*).[82] Drawing on this, Bede made it clear that Elijah was lifted to the 'airy heaven' (*caelum aerium*).[83] He argued that by this we should understand that Elijah did not ascend to the true heaven—the *caelum superius*—but to the upper *aer* (*in altum aeris*); from there he was brought to the 'joys of paradise' (*paradisi gaudia*).[84] In Bede's mind, in other words, there was a clear distinction between the paradise to which Elijah was transported and the *caelum superius*. In his commentary on Acts, Bede expanded on the differences between Christ's ascent and Elijah's. The fact that angels appeared to the apostles at the Ascension (Acts 1:10) indicated that Christ was brought 'truly' (*uere*) to heaven (i.e. the *caelum superius*) and not 'as if' (*quasi*) to heaven like Elijah.[85] In asserting that Elijah was raised to the upper region of the *aer*, and thence to a *paradisus*, was Bede thinking of the paradise of the upper *aer* described in *De ordine creaturarum*?[86] It is a tantalizing possibility, and one lent some

weight by Bede's depiction of the interim paradise in the Dryhthelm narrative (see next section).

Christ, however, was not the only one to have ascended to heaven. Bede wrote about a number of holy men and women whose sanctity was so great that they ascended directly to heaven at death. He related the story of Chad, who, just before he died, was visited by a delegation of angels. A witness heard the sound of sweet and joyful singing 'descend from heaven to earth' (*de caelo ad terras usque discendere*); this sound travelled from the south-east (specifically from the direction of the rising of the winter sun) to the roof of Chad's oratory.[87] As Chad later clarified to the witness, this sound was caused by a cohort of angels who had come to summon Chad to his heavenly reward. A week later, Chad died. On this occasion, a different witness saw the soul of Chad's brother, Cedd, 'descend from heaven' (*descendere de caelo*) with a crowd of angels and ascend again with Chad's soul.[88] Elsewhere, Bede related how, on the death of Abbess Hild, a nun in a nearby monastery had a vision in which the roof appeared to roll back and she saw Hild's soul being carried 'to heaven' (*ad caelum*) in the company of angels.[89] At the same moment, another witness in Hild's own monastery at Whitby saw Hild's soul 'ascending with angels to heaven' (*cum angelis ad caelum ire*).[90] St. Cuthbert experienced similar ascension visions: first, he saw a 'light from heaven' (*de coelo lumen*) interrupt the darkness of the night; in this light, 'the choir of the heavenly company arrived to earth' (*coelestium chorus agminum terras petisse*).[91] They then returned to their 'heavenly homeland' (*superna patria*), carrying a singularly bright soul (the soul, as it turned out, of St. Aidan). The version of this story found in Bede's metrical *uita* of Cuthbert used even more specific language: Aidan, Cuthbert told his companions, was brought through the 'fiery aether' (*flammaea aethra*) and 'crossed through the stars' (*sidera transit*) on his way to behold God.[92] On another occasion, Cuthbert saw the soul of a holy man being carried 'by the hands of angels' (*manibus angelicis*) to the 'joys of the heavenly kingdom' (*gaudia regni coelestis*).[93]

It is clear that the spiritual realm, in Bede's vision, was a tangible and traversable world. It could not be touched or apprehended at all by those in corporeal bodies. But it had spatial, or at least locational, attributes, nevertheless. The stories told by Bede of souls ascending with angels should not be read as mere allegories of a deeper metaphysical truth. These souls were travelling through space. Even in those cases where there no miraculous vision took place, Bede assumed the same aspect of ascension—Hereberht and Cuthbert, he wrote confidently, were 'brought together to the heavenly kingdom by the service of angels'.[94] Close attention to the language used by Bede to describe these ascensions is revealing of the extent to which he thought of these events in physical terms. The soul had to travel upwards through the *aer*, the *aether* and the firmament before it could enter heaven.

One final thing worth noting is Bede's intimation that the entrance to heaven is located in the south-east. The angels who arrived for Chad's soul came, in Bede's words, 'from the south-east, that is from the highest point of

the rising of the winter sun' (*ab euroaustro, id est ab alto brumalis exortus*).[95] Presumably they returned in that direction as well. What is the meaning of this depiction? As I shall show in the next section, the idea that heaven and hell were to be associated with particular directions was long-established one on which Bede was able to put his own characteristic stamp.

Hell

While many perfectly respectable authorities engaged in unabashed speculation about the location of hell, we find no such theorization in Bede's cosmographical writings. He did not follow the lead of other writers in alluding to the location of hell in his cosmographic handbook, *De natura rerum*, though he did include a reference to hell in his final chapter on 'the fires of Mt Etna' (*incendium aetnae*): following Isidore, Bede saw Etna as a symbol of hell, its 'extremely long-lasting conflagration' (*tam diutinum incendium*) standing 'as a demonstration of the fire of hell' (*ad exemplum gehennae ignium*).[96] Likewise, there is little discussion of infernal topography to be found in *In Genesim* or *De temporum ratione*. We must venture further afield in order to ascertain the topographical and physical details of Bede's hell.[97]

Bede discussed the harrowing of hell in a number of works, and he was not reticent about depicting it as a *descent* into hell.[98] At the same time, the context of these instances is usually too vague to deduce much else. An exception is found in Bede's hymn *De Ascensione Domini*, which shows, in the words of one recent study, a 'thematic focus on movements across space'.[99] In it, the descent of Christ to hell mirrors his ascent to the heavens—movement downwards and upwards form the hymn's thematic centre.[100] To judge from these references, Bede—like Augustine, Gregory and many others before him—thought of hell as being located at a lower level of the cosmos.

In his poem *De die iudicii*,[101] Bede described the eternal punishments of hell, in an evocation that mostly relied on describing the things that would be lacking there and the absolute despair of the damned: 'all comforts flee away',[102] he wrote, 'no happy face will ever be seen there, only pain and lamentation, gnashing of teeth and fear, trembling dread, weariness, sorrow, fierce indignation and listlessness, and souls wandering among the flames in the blind prison'.[103] He also included some remarks that suggest something of the physical properties of hell. Hell, according to Bede, is a dark and obscure place, 'where no spark of light shines on wretched men' (*lucis ubi miseris nulla scintilla relucet*)[104]—something that might seem odd at first, given the ubiquity of fire and flame there. The idea that the fires of hell give off no light, however, was a patristic commonplace.[105] In this, as in all else, hell was the opposite of radiant heaven. Hell also stank. In hell, wrote Bede, 'the stench of overwhelming decay fills your nostrils' (*fetor praeingenti complet putredine nares*).[106]

One of the most interesting aspects of Bede's vision of hell is that its punishments comprise both heat and cold. *De die iudicii*, for instance, has

eyes 'weeping' (*flens*) from the 'excessive heat of the furnace' (*nimius ardor camini*) and teeth 'gnashing' (*stridens*) because of the 'extreme cold' (*nimius frigus*).[107] In one of his earliest commentaries, Bede linked the 'hail and fire' of Revelation 8:7 with the 'punishment of Gehenna' (*poena gehennae*) and connected this hellish torment with the curse wished upon sinners in Job 24:19 ('let them pass from snow waters to excessive heat').[108] The fires of hell had long held a prominent place in Christian literature, but the origins of the ice of hell are not so immediately apparent—something that has led some scholars to suggest the influence of the apocrypha on Bede in this instance (see below). As Leslie Whitbread put it, the idea of icy torments in hell 'seems un-Scriptural and therefore strange in the work of Bede, which notoriously abounds in Scriptural dogma'.[109] In fact, there were a number of theologically sound traditions that understood the torments of hell to incorporate cold. This could be read into Job 24:19, which spoke of the punishment of passing 'from snowy waters to excessive heat'. Jerome, in a commentary on Matthew, wrote: 'we read very clearly in Job that there are two Gehennas, one of excessive fire and one of excessive cold'.[110] This reading was repeated by Isidore in his *Etymologiae*.[111] Meanwhile, there existed a tradition that the 'gnashing of teeth' promised to those in hell (Matt 8:12, 13:42, 13:50, 22:13, 24:51, 25:30; Luke 13:28) implied that there was intense cold as well as heat in hell (though, strangely, Jerome did not make this link in his commentary on Matthew). This was famously voiced by the author of the Latin *Visio Pauli*, who depicted souls in hell 'in coldness and gnashing of teeth' (*in frigore et stridor dentium*),[112] but the *Visio* was not the only text to make this connection. The early-seventh-century *Glosa Psalmorum ex traditione seniorum* and the later pseudo-Hieronymian *Breuiarium in Psalmos* both included the same explanation: 'by "gnashing of teeth" cold is understood … because both cold and heat exist there (in hell)'.[113] (The seventh-century Irish commentary, *Commemoratorium de Apocalypsi Iohannis apostoli*, meanwhile, was of the opinion that the hail and fire of Revelation 8:7 signified the punishment of sinners in the future.)[114] I suspect that the *Glosa Psalmorum*, the *Breuiarium* or some related glossing tradition is likely to lie behind Bede's explanation of the 'weeping and gnashing of teeth': he used similarly terse language to explain, in his commentary on Luke, that 'weeping tends to be caused by heat, gnashing of teeth by cold'.[115] In his *In prouerbia Salomonis*, he provided a similar reading: 'fire and smoke, of course, tend to produce weeping, cold to produce gnashing of teeth'.[116] In the context of Judgement Day poetry, there is another likely source for this imagery: the fifth-century *Commonitorium* of Orientius, which depicted the punishments of sinners in very similar terms. Orientius spoke of the sinners forced into 'furnaces blazing with sulphurous fire' (*sulphureo flagrantes igne camini*), others bound by 'ice harsh with frost' (*dura gelu glacies*).[117] Bede's use of heat and cold in his depictions of hell, then, was drawing on an already established tradition about infernal torment. Of course, this image also tied in with Bede's ideas about the cosmic role of the elements of fire

and water, which we have already alluded to and which I shall discuss further in Chapter 8.

The afterlife in the voyage of Dryhthelm

In Book 5 of the *Historia ecclesiastica*, Bede recounted the story of Dryhthelm, a man who died one night and whose soul was led by a figure 'shining in appearance and bright of garment' (*lucidus aspectu et clarus indumento*) on a whistle-stop tour of the afterlife. Dryhthelm was first brought 'towards the rising of the sun in summer' (*contra ortum solis solstitialem*) to the purgative hell:

> *cumque ambularemus, deuenimus ad uallem multae latitudinis ac profunditatis, infinitae autem longitudinis, quae ad laeuam nobis sita unum latus flammis feruentibus nimium terribile, alterum furenti grandine ac frigore niuium omnia perflante atque uerrente non minus intolerabile praeferebat. Vtrumque autem erat animabus hominum plenum, quae uicissim huc inde uidebantur quasi tempestatis impetu iactari. Cum enim uim feruoris immensi tolerare non possent, prosiliebant miserae in medium rigoris infesti; et cum neque ibi quippiam requiei inuenire ualerent, resiliebant rursus urendae in medium flammarum inextinguibilium.*
>
> As we walked we came to a very deep and broad valley of infinite length. It lay on our left and one side of it was exceedingly terrible with raging fire, while the other was no less intolerable on account of the violent hail and snowy cold which was drifting and blowing everywhere. Both sides were full of the souls of men which were apparently tossed from one side to the other in turn, as if by the fury of the tempest. When the wretched souls could no longer endure the fierceness of the terrific heat, they leapt into the midst of the deadly cold; and when they could find no respite there, they jumped back only to burn once again in the midst of the unquenchable flames.[118]

Moving on from this valley, they entered a region of impenetrable darkness and came to the mouth of hell:

> *uidi subito ante nos obscurari incipere loca, et tenebris omnia repleri. Quas cum intraremus, in tantum paulisper condensatae sunt, ut nihil praeter ipsas aspicerem, excepta dumtaxat specie et ueste eius, qui me duceba. Et cum progrederemur "sola sub nocte per umbras", ecce subito apparent ante nos crebri flammarum tetrarum globi ascendentes quasi de puteo magno rursumque decidentes in eundem … At cum idem globi ignium sine intermissione modo alta peterent, modo ima baratri repeterent, cerno omnia quae ascendebant fastigia flammarum plena esse spiritibus hominum, qui instar fauillarum cum fumo ascendentium nunc ad sublimiora proicerentur, nunc retractis ignium uaporibus relaberentur in profunda.*

> *Sed et fetor incomparabilis cum eisdem uaporibus ebulliens omnia illa tenebrarum loca replebat.*
>
> I suddenly saw that the places in front of us began to grow dimmer until darkness covered everything. As we entered this darkness, it quickly grew so thick that I could see nothing else except the shape and the garment of my guide. As went on, "through the shades in the lone night", there suddenly appeared before us masses of noisome flame, constantly rising up as if from a great pit and falling into it again … I saw, as the globes of fire now shot up and now fell back again ceaselessly into the bottom of the pit, that' the tips of the flames as they ascended, were full of human souls which, like sparks flying upward with the smoke, were now tossed on high and now, as the vaporous flames fell back, were sucked down into the depths. Furthermore, an indescribable stench which rose up with these vapours filled all these abodes of darkness.[119]

After this, Dryhthelm and his guide took a path 'to the right' (*ad dextrum iter*) and moved 'as if in the direction of the rising of the winter sun' (*quasi contra ortum solis brumalem*), coming eventually to the interim paradise:

> *Nec mora, exemtum tenebris in auras me serenae lucis eduxit. Cumque me in luce aperta duceret, uidi ante nos murum permaximum, cuius neque longitudini hinc uel inde neque altitudini ullus esse terminus uideretur. Coepi autem mirari, quare ad murum accederemus, cum in eo nullam ianuam uel fenestram uel ascensum alicubi conspicerem. Cum ergo peruenissemus ad murum, statim nescio quo ordine fuimus in summitate eius. Et ecce ibi campus erat latissimus ac laetissimus, tantaque fragrantia uernantium flosculorum plenus, ut omnem mox fetorem tenebrosi fornacis, qui me peruaserat, effugaret ammirandi huius suauitas odoris. Tanta autem lux cuncta ea loca perfuderat, ut omni splendore diei siue solis meridiani radiis uideretur esse praeclarior. Erantque in hoc campo innumera hominum albatorum conuenticula sedes que plurimae agminum laetantium.*
>
> He quickly brought me out of the darkness into a serene and bright atmosphere. As he led me on in open light, I saw a very great wall in front of us which seemed to be endlessly long and endlessly high everywhere. I began to wonder why we were approaching this wall, since I could nowhere see any gate or window or steps to it. When we had reached the wall we suddenly found ourselves on top of it, by what means I know not. There was a very broad and pleasant plain, full of such a fragrance of growing flowers that the marvellous sweetness of the scent quickly dispelled the foul stench of the gloomy furnace which had hung around me. So great was the light that flooded all this place that it seemed to be clearer than the brightness of daylight or the rays of the noontide sun. In this meadow there were innumerable bands of men in white robes, and many companies of happy people sat around.[120]

Dryhthelm and his guide passed through the interim paradise and began to approach the kingdom of heaven:

> *aspicio ante nos multo maiorem luminis gratiam quam prius, in qua etiam uocem cantantium dulcissimam audiui, sed et odoris fragrantia miri tanta de loco effundebatur, ut is, quem antea degustans quasi maximum rebar, iam permodicus mihi odor uideretur, sicut etiam lux illa campi florentis eximia, in comparatione eius quae nunc apparuit lucis, tenuissima prorsus uidebatur et parua. In cuius amoenitatem loci cum nos intraturos sperarem, repente ductor substitit; nec mora, gressum retorquens ipsa me, qua uenimus, uia reduxit.*
>
> I saw in front of us a much more gracious light than before; and amidst it I heard the sweetest sound of people singing. So wonderful was the fragrance which spread from this place that the scent which I had thought superlative before, when I savoured it, now seemed to me a very ordinary fragrance; and the wondrous light which shone over the flowery field, in comparison with the light which now appeared, seemed feeble and weak. When I began to hope that we should enter this delightful place, my guide suddenly stood still; and turning round immediately, he led me back by the way we had come.[121]

Scholars have not always been sure how to approach the story of Dryhthelm's voyage to the afterlife. Bede himself presented it as an objective record of Dryhthelm's experience, one related to him via a monk who had known Dryhthelm and spoken to him often of his experiences.[122] If Bede were to be taken at his word, we might assume that the story of the voyage has little to tell us about Bede's specific beliefs about the afterlife—that it reflects an independent oral culture rather than the learned one of Bede's library.[123] But recent studies have begun to move towards the idea that the Dryhthelm narrative is a literary work shaped to suit Bede's own agenda.[124] Although Dryhthelm himself may well have existed and gone through some kind of out-of-body experience, the story of what he saw during this extra-corporeal voyage was doubtlessly shaped and re-shaped at the various steps in its transmission,[125] and Bede, a man with strong assumptions about what such a traveller was likely or unlikely to have witnessed, must surely have imprinted his own preconceived ideas onto the narrative.

We might expect, then, for the Dryhthelm narrative to reflect Bede's worldview more than Dryhthelm's. For at least one aspect of the narrative, we are certainly justified in taking such a view—Helen Foxhall Forbes has shown that the fourfold division of the afterlife presented in it is demonstrably an innovation of Bede: it mirrors the details found in his advent homily and is clearly based on a close reading of his textual sources, particularly the *Moralia* of Gregory the Great.[126] What other features of the Dryhthelm narrative can we take as representative of Bede's own views? Scholars have

not always been inclined to lay some of the more fantastical details of Dryhthelm's journey at Bede's door. Assuming that the story owes its origins to an independent oral tradition allows its singular characteristics to be explained away. If we accept the idea that the Dryhthelm narrative was a literary work shaped by Bede, however, we must reconsider this approach. Instead of assuming an oral origin for some of these surprising details, we should ask whether they jibe with Bede's views as expressed elsewhere. Similarly, the many links that scholars have drawn between the Dryhthelm narrative and apocryphal literature must be re-examined.[127] Bede strongly and unequivocally disapproved of the 'pretences' (*latebrae*) and 'prattle' (*neniae*) of the apocrypha,[128] and it is unlikely that he would have drawn on texts such as the *Viso sancti Pauli* in piecing together his understanding of the afterlife. As I shall demonstrate in this section, the details of the Dryhthelm narrative, far from being the remnants of a folkloric or apocryphal origin, bear Bede's fingerprints: they were either based on scriptural or theological precedent or were derived from his 'filling-in-the-gaps' approach to theological-cosmological questions. They correspond with Bede's opinions as recorded in other places, and they fit neatly with the cosmological vision that I have been outlining in this book. I will attempt to begin to flesh out the theological and literary contexts that may have informed Bede's depiction of the afterlife in the Dryhthelm narrative by considering four subjects, in turn: (1) the narrative's supposed 'horizontal' axis, (2) the depiction of hell and the purgative hell, (3) the depiction of heaven and the interim paradise, and (4) the text's emphasis on directional detail (north, south and east, but also right and left).

The Dryhthelm narrative's supposed horizontal axis

The character of late antique and medieval voyages to the afterlife has been obscured to some extent by an insistence on an artificial division between vertical and horizontal journeys. A number of scholars have sought to characterize the Dryhthelm narrative as a vision typified by its horizontal axis, as opposed to the vertical axis employed in 'les visions ascensionnelles'.[129] Ananya Kabir has argued that Bede wanted to 'omit the element of ascent. Dryhthelm and his guide walk (*incedebamus*, *ambularemus*), not rise, and the only direction mentioned emphasises horizontal movement'.[130] Sarah Foot, likewise, writes that the Dryhthelm narrative 'shows us an other world laid out essentially on one horizontal plane'.[131] For Foot, it is clear that the otherworld can be depicted 'either in vertical terms *or* on a predominantly horizontal plane'.[132] Sims-Williams and Claude Carozzi also describe the Dryhthelm narrative as a horizontal journey.[133] This characterization of the Dryhthelm story may be influenced by a desire to link Bede's story with the apocrypha or with Insular traditions, such as the *Nauigatio sancti Brendani*, but it is artificial and unhelpful.

In fact, the narrative provides vertical as well as horizontal directional pointers: the purgatorial realm is located in a valley 'of great depth' (*multae profunditatis*); hell itself is even lower—its entrance is in the form of a 'great pit' (*puteus magnus*) in the ground; the interim paradise, on the other hand, is sat atop a 'great wall' (*murus permaximus*), so tall that, from the ground, it appears to be of an endless height. Dryhthelm never actually entered heaven itself or even saw the entrance to it—perhaps if he had, Bede's narrative would have implied still further ascension. The fact that Bede emphasized the eastern route of Dryhthelm's journey should not distract from the fact that he envisioned hell and the purgative hell as being located below the horizontal plane and the interim paradise far above it. Neither should we be misled by Bede's seemingly curious insistence on the fact that Dryhthelm and his guide 'walked' to their destinations. Such terminology is not unique to Bede's narrative and can be found in other texts that are concerned with similar journeys: according to the earliest manuscript of the *Vita Fursei*, Harley MS 5041 (N France, s. viii^{med}), one of Fursa's angelic guides 'walked' (*ambulabat*) alongside him during his trip to the heavens[134]; some versions of the *Visio Pauli* likewise depict Paul and his guide walking (*ambulare*) between regions.[135] The depiction of walking between afterlives can appear odd when read in conjunction with other narratives, such as the voyage of Salvius, recorded by Gregory of Tours; Salvius, at the moment of his death, ascended directly upwards so that the moon and the sun, the clouds and the stars lay under his feet.[136] But the logic of the situation did not demand an immediate ascent directly upwards for Dryhthelm. Salvius may have journeyed directly upwards to heaven but Dryhthelm first took a visit to the chasm of the purgative hell and the pit of hell, after which he did in fact ascend, when the angel brought him to the top of the infinitely tall wall where lay the interim paradise. Reading the Dryhthelm narrative as a horizontal journey is a misreading.

Hell and the purgative hell

According to Dryhthelm's report, the purgative hell features both 'raging fires' (*flammae feruentes*) and 'violent hail and snowy cold' (*furens grando ac frigor niuium*). This depiction of alternating hot and cold punishments has puzzled scholars. For many, there are no obvious suspects for an immediate source for this idea, bar the *Visio Pauli* and the various Enochian apocrypha.[137] As we have seen, however, Bede's understanding of hell's two extremes of temperature was derived from Jerome, the Psalm commentaries and perhaps Orientius's *Commonitorium*—it has nothing to do with the apocrypha. From a narrative point of view, this imagery allowed Bede to tie Dryhthelm's infernal experiences to the ascetic practices of the North Atlantic. Dryhthelm, after returning to life, became a monk and spent the rest of his life practising extreme bodily mortification. Once, as he was

immersing himself in the cold sea, his compatriots asked him how he was able to withstand the extreme temperature. 'I have seen colder' (*frigidiora ego uidi*) was his reply.[138]

The 'great pit' (*puteus magnus*) that serves as the entrance to hell has also suggested to scholars the influence of the *Visio Pauli* and the 'well of the abyss' (*puteus abyssi*) that appears in that text.[139] There were, however, a number of 'pits' referred to throughout the books of Scripture, among them the 'pit of destruction' of Psalm 54:24, which the *Glosa Psalmorum* had glossed as 'hell',[140] and the 'bottomless pit' of Revelation 9:11, which the *Commemoratorium de Apocalypsi Iohannis apostoli* had read as a reference to hell.[141] Caesarius of Arles, a respectable and orthodox author, was in the habit of speaking of the 'pit of hell' (*inferni puteus*).[142] We do not need to point to the *Visio Pauli*, then, to account for this aspect of the Dryhthelm narrative—there was a clear notion already common among mainstream Christian writers that hell's entrance took the form of a large pit.

I have already noted the links that many Christian authors saw between volcanoes and hell. Unsurprisingly, many of the details of the hell-mouth witnessed by Dryhthelm appear to have been drawn from literary descriptions of volcanoes, Mt. Etna in particular.[143] The 'globes of fire' (*globi flammarum*) described by Dryhthelm were a common feature of such descriptions.[144] Dryhthelm also reported that the entrance to hell exuded a horrible smell. We have seen that Bede made similar comments about hell in *De die iudicii*. The association of a horrible stench with hell went back to the Book of Revelation, with its lake of fire and sulphur (Rev 19:20). That sulphurous lake was read as a reference to the eternal punishments of hell by Bede in his exegesis—and he knew that sulphur implied stench.[145] He was not the first to make this connection. Gregory the Great, following a similar logic, had submitted that the damned would be tormented by 'the punishment of foul smells' (*foetoris poena*).[146] Gregory also recorded the post-mortem soul-voyage of a soldier who saw a foul-smelling river blocking the way to paradise, with a single bridge across which souls were attempting to travel.[147] It was a hagiographical commonplace, meanwhile, that the presence of demons was revealed by the intolerable stench they exuded.[148] Sulphur, of course, was also a feature of volcanic fissures.[149] It was also well known that, despite its flames, hell was impenetrably dark, as Bede would have read in Scripture (Matt 8:12); in the Church Fathers[150]; or indeed in Vergil's *Aeneid*, a line from which he borrowed to illustrate Dryhthelm's ordeal.[151] In sum, then, the two hells visited by Dryhthelm reflect the kind of infernal imagery that had been developing in Christian thought over the preceding centuries, tied together as always by Bede's genius for synthesis.

Heaven and the interim paradise

Bede's depiction of the meadow of the interim paradise is highly redolent of Gregory the Great's story of the soldier who died and visited heaven.[152]

Indeed, the wording echoes Gregory's in a number of places, both authors describing paradise as full of the fragrance of flowers and its inhabitants as congregating in *hominum albatorum conuenticula*.[153] The idea that heaven or paradise resembled a flowery plain or meadow or garden has, of course, a long lineage and is not even unique to Christianity.[154] It was as certain an image of heaven as anything not explicitly mentioned in Scripture could be. This imagery had certainly permeated Bede's understanding: in *De templo*, written at about the same time as the *Historia ecclesiastica*, he commented on the lilies on the pillars of the Temple, and indicated that their symbolism was unmistakable: 'What else can the lilies symbolize but the glory of the heavenly homeland and the beauty of immortality fragrant with the flowers of paradise?'[155] That paradise was infused with light was another long-established attribute and, based on Bede's comments on the matter in *In Genesim*, we can see why the light of paradise should be depicted as brighter than 'the brightness of daylight or the rays of the noontide sun' (*omnis splendor diei siue solis meridiani radii*).[156]

Why did Bede depict the interim paradise as a garden sitting atop an extremely high wall? In terms of literary structure, the image of an elevated paradise provided an appropriate counterpoint to the sunken location of the purgative hell. But there may have been other reasons. Bede, as we have seen, had claimed that Elijah had been raised to the upper *aer* (*in altum aeris*) and brought from there to the 'joys of paradise' (*paradisi gaudia*),[157] and that he believed that the terrestrial paradise of Adam and Eve was of such an altitude that 'not even the waters of the Flood, which deeply covered all of the surface of our world, were able to reach it',[158] a reading which implied that the terrestrial paradise lay on the border between the *aer* and the *aether*. Later thinkers, inspired in part by Bede, would explicitly locate Eden atop a tall mountain that reached to the upper *aer*.[159] The author of *De ordine creaturarum*, meanwhile, had been equally explicit in locating the paradise of the blessed—a fertile garden—in the 'higher space' (*spatium superius*) of the atmosphere.[160] It seems plausible that this was Bede's understanding as well, though he never expressly said so. What are we to make of these suggestive parallels? The fact that the paradise to which Elijah was taken is located in the upper *aer* suggests that it may well correspond to the interim paradise, sat atop its infinitely high wall. Could it be that Bede also believed this paradise to be the same as the earthly paradise, which survived the Flood because of its great height? Should this location also be folded in to the *sinus Abrahae*, where the patriarchs awaited the final judgement? Unfortunately Bede provided no categorical answers but as we have seen in other chapters, such speculations were by no means foreign to him.

Hell in the north-east and heaven in the south-east

We have already seen that Bede followed the venerable tradition of placing the Garden of Eden in the east.[161] We have also noted that Bede, in retelling

the story of Chad's ascension, described the angels as coming from the south-east. He also included in the Dryhthelm narrative some very specific directions: the angel and Dryhthelm first walked 'towards the rising of the sun in summer' (*contra ortum solis solstitialem*)—in other words, towards the north-east. The deep valley of purgatorial punishment lay 'on the left' (*ad laeuam*). After a brief sojourn in front of the mouth of hell, the angel led Dryhthelm 'to the right' (*ad dextrum*) and they walked 'towards the rising of the sun in winter' (*contra ortum solis brumalem*)—the south-east—and arrived at the high wall atop which sat the interim paradise.

More than any other feature of the Dryhthelm narrative, these directions have seen no consensus among scholars. To begin with, there is no agreement on *where* exactly the afterlife realms are supposed to be located. Sarah Foot has recently argued that this reflects a model

> where heaven lies in the east (straight ahead after the pair had turned right from their north-easterly trajectory to walk south-east) and hell lies in the north. In between the two extremes lie two unnamed places of waiting: a provisional hell and a provisional heaven.[162]

Claude Carozzi, on the other hand, envisions a journey first to the north-east and then to the east.[163] These readings, it seems to me, rather depart from Bede's words—he was very clear that the hellish regions lie to the north-east and the heavenly to the south-east.[164] On the other hand, the fact that Bede emphasized not only the cardinal directions but also left and right has attracted little attention from scholars.

What is the relevance of these directions? For Sims-Williams, they are an echo of 'the frequent compass directions' of the apocryphal visions.[165] The *Visio Pauli* and the Enochian material locate heaven and hell according to journeys to the far eastern or western edges of the world. Furthermore, the language of the apocrypha, which often speaks of travelling in the direction of the sun or away from the sun, seems to echo Bede's language of directions according to the solar directions: the *Visio Pauli*, for instance, speaks of a journey to hell 'by way of the setting of the sun' (*per occasum solis*).[166] In fact, however, Bede frequently used reference to the sunrise and sunset to provide directional detail in his narratives—for instance, he described the hill of Wilfare as being located 'towards the setting of the sun at the summer solstice' (*contra solstitialem occasum*).[167] He is most likely to have picked up this habit from the much-admired Pliny, who, in the second book of his *Naturalis historia*, described the directions of the winds with reference to the equinoctial sunrise (*oriens aequinoctialis*) and the winter sunrise (*oriens brumalis*).[168] Descriptions of direction with reference to the rising sun need not, therefore, be read as a mark of the influence of the apocrypha—it was Bede's normal working method. As to the idea that one should travel to the far east to see paradise, there were a variety of more orthodox traditions that could have lent support to this idea, as we shall see.

There was a venerable belief that the entrance to heaven lay in the east. According to Psalm 67:34, Christ ascended to heaven in the east. Accordingly, scriptural references to the east were connected by exegetes to Christ and the Ascension, particularly by Jerome and Gregory the Great.[169] The image of the eastern gate that was shut (Ez 44:1–3) became synonymous with Christ, who by his death on the cross unlocked the gate to the kingdom of heaven.[170] Christ's return on Judgement Day was also expected to occur in the east, because Acts 1:11 stated that Christ would return in the same manner that he left—and Matthew 24:27 warned: 'as the lightning comes from the East, so shall the Son of Man appear'. Christ was also strongly identified with a series of solar images: he was the 'sun of righteousness' (Mal 4:2) and the man of whom the prophet Zechariah said 'the east/sunrise is his name' (Zech 6:12).[171] The visionary author of Revelation 7:2 recorded: 'I saw another angel ascending from the rising of the sun, having the sign of the living God'. This angel coming from the sunrise was understood in the Apocalypse commentaries as Christ, returning from the east on the Day of Judgement.[172] Not only had Christ ascended to the east, but some texts also associated the angels and the souls of martyrs with the east. The martyr Saturus saw in a vision that, after their deaths, he and his sister Perpetua were to be carried to the east by angels.[173] In Gregory's *Dialogi*, Benedict was said to have ascended to heaven via 'a road straight to the east, extending from his cell right up to the sky'.[174] Adomnán reported that, on the day of Columba's death, a fiery column was seen rising from the east.[175] These ideas were part of the everyday fabric of Christian worship: the liturgy incorporated the imagery of Christ as the east/sun,[176] and eastern orientation of both church buildings and prayer had been a feature of Christian worship since its earliest centuries[177]—this, according to Ambrose, in order to see Christ 'face to face' (*directo*).[178] Other scriptural traditions emphasized different directions. Habakkuk 3:3 spoke of God coming 'from the south'. This was taken literally by some exegetes: as an eighth-century Hiberno-Latin poem has it, on the Day of Judgement, 'God will appear from the south'.[179] The north, meanwhile, was associated with evil, with Satan and with hell.[180] The prophet Jeremiah records: 'And the Lord said to me: from the north shall an evil break forth upon all the inhabitants of the land' (Jer 1:14). In Isaiah 14:13, a speaker, identified by Christian readers with Satan, proclaims: 'I will ascend into heaven, I will exalt my throne above the stars of God, I will sit in the mountain of the covenant, in the sides of the north'. A contemporary of Bede, the East Anglian hagiographer Felix, recorded that St. Guthlac was carried by demons to the 'region of the northern sky' (*septentrionalis caeli plaga*), where he beheld the 'abominable jaws of hell' (*nefandae tartari fauces*).[181] The relative directions of right and left were subject to similar interpretations. Inspired by Scripture (particularly Matthew 25:31–46), it was understood that, on the Day of Judgement, Christ would set the elect at his right hand and the sinners at his left.[182] The good thief, who was crucified with Jesus and was promised entry into paradise (Luke 23:39–43), was

thought to have been crucified at Christ's right hand.[183] 'After the resurrection', preached Augustine, 'you will be found on the right-hand side', where 'there are no bad people'.[184]

Christian exegetes of late antiquity were able to combine these directional references into a complex matrix of symbolism. References to God appearing from the south could easily be subsumed into the overarching image of Christ as rising sun: the southern band of the world, after all, was the one over which the sun moved. In this way, Jerome was able to connect the 'God from the south' with the sun and Christ.[185] In the Hebrew Bible, the cardinal directions were often tied to relative directions—south was at the right hand, north at the left.[186] This allowed for even more complex interpretation of scriptural directions. The most important text in this regard is Jerome's commentary on Zechariah.[187] In that work, Jerome, in an ingenious piece of exegetical elaboration, married the imagery of north, south and east with the idea that the right and left denoted the elect and the damned, respectively. Zechariah 14:4 consists of an apocalyptic vision: Yahweh will stand upon the Mount of Olives facing east—the Mount of Olives will then be split in half from east to west; a great valley will divide the mountain, one half to the north and one to the south. Jerome's reading of Zecheriah 14 was explicitly apocalyptic: 'clearly the second coming of the Saviour is being proclaimed'.[188] According to Jerome, the idea that the Mount of Olives shall be split in two was in fact a reference to the division of the damned and the elect on Christ's left and right on the Day of Judgement. The north is joined with the west on the left-hand side, and the south is joined with the east on the right: 'to the left the Circumcision will stand, to the right the Christian people'.[189] In Jerome's interpretation of Zechariah, therefore, the left hand, the north and the west were tied together and linked to the damned and to hell and Satan; the right hand, the south and the east, meanwhile, were linked to the elect and to paradise.

But there was even further elaboration to be found. In the *Moralia in Iob*, Gregory the Great read north and south as symbols of the damned and the elect, respectively; he also read references to left and right in the same way.[190] His dedication to these readings was such that he spent no little time explaining away scriptural verses (Kings 22:19, Job 30:12) that appeared at first to contradict them.[191] Most importantly for our purposes, Gregory shifted the chronology of these paradigms: north and south no longer represented only the division of souls on the Day of Judgement but also at the moment of death:

> *In die etenim mortis suae iustus ad austrum cadit, peccator ad aquilonem, quia et iustus per feruorem spiritus ad gaudia ducitur, et peccator cum apostata angelo, qui dixit: sedebo in monte testamenti, in lateribus aquilonis, in frigido suo corde reprobatur.*

> Indeed, on the day of their death (*in die mortis suae*) the just person "falls to the south" (Eccl 11:3) and the sinner "to the north", because

> both the just person by the passion of the spirit is led to delights, and the sinner is condemned in their cold heart, along with the apostate angel who said "I will ascend into heaven, I will exalt my throne above the stars of God, I will sit in the mountain of the covenant, in the sides of the north".[192]

Gregory, then, added an important wrinkle to this tradition—one that cannot have escaped Bede's attention, given that his vision of the afterlife was derived from a very close reading of this very text.[193] Jerome and Gregory had knit scriptural references to the north, south and east together into a coherent whole: one that, in Gregory's reading at least, implied that these directions had relevance to the division of souls in the interim.

This schema of directional symbolism evolved further once it reached the Insular world. A south-eastern heaven—a detail seemingly derived from Jerome's distinction between saints in the south-east and sinners in the north-west—is a distinguishing characteristic of Old English literature. This tradition was highlighted many decades ago by literary scholars, who linked Bede's presentation of the south-east with similar images in early vernacular poetry.[194] *Christ III* depicted Christ returning 'from the south-east' (*suþaneastan*).[195] In *Genesis B*, Eve was said to have had a vision of God in his throne, located 'south and east' (*suð and ēast*).[196] The Old English Martyrology recorded that, at Wilfrid's death, the angels were heard to cry out from the south-east.[197] There are similar references to the south-east in Insular Latin hagiography of the period: Stephen of Ripon described a miraculous white arc that appeared on the anniversary of Wilfrid's death: it stretched from the place he was buried and ended 'towards the south-east quarter of the morning sky and tending upwards' (*in euronothum orientis caeli sursum adherens*).[198]

Bede was very aware of these traditions of directional symbolism. The one 'who is in the north' (*qui ab aquilone est*) mentioned in Joel 2:20 he identified with Satan.[199] He interpreted the Book of Revelation's angel coming from the rising of the sun (Rev 7:2) as Christ.[200] He was fond of referring to Christ as the 'sun of justice' (*sol iustitiae*) of Malachy 4:2,[201] and the 'sunrise from on high' (*oriens ex alto*) of Luke 1:78.[202] The 'rising sun' mentioned in the Book of Genesis just prior to the destruction of Sodom and Gomorrah 'signifies the coming of Last Judgement, when destruction will suddenly overwhelm the wicked after all the just have been saved'.[203] He was also happy, like Jerome, to equate 'south' with 'east' for the purposes of scriptural symbolism.[204] What is noteworthy, however, is that Bede built on these ideas and added a specificity not found in his sources. Given his deep and abiding fascination with time-reckoning, it is perhaps not surprising that he absorbed this portfolio of traditions related to the east and combined it with the technical language of the computus manuals. Thus the 'rising sun' whose rays streamed through the doors of Solomon's Temple, according to Josephus, became, in Bede's account, the 'rising *equinoctial*

sun' (*sol aequinoctialis oriens*).[205] This, of course, tied the Temple of Solomon to one of the most crucial aspects of Bede's theology: the celebration of Easter (as the dating of Easter is tied to the vernal equinox).[206] In his reading of God's creation, meanwhile, Bede emphasized the rising of the sun on the first ever vernal equinox, which took place on the fourth day of creation.[207] He was also interested in the symbolism of right and left. Benedicta Ward has discussed how, in Bede's commentaries, 'the right side always carried … positive significance'.[208] He understood that the damned and the elect would be, quite literally, arranged at Christ's left hand and his right hand, respectively.[209] Accordingly, the kingdom of heaven, he claimed, 'is properly represented by the term "right hand"' (*iure uocabulo dexterae figuratur*):

> *Namque ubi dextera simul et sinistra in bono accipiuntur uel iudaeam et gentilitatem ut in expositione basium supra diximus uel praesentem ecclesiae uitam et futuram uel laeta saeculi et tristia uel aliquid huiusmodi, ubi uero absolute dextera in bono ponitur aeterna gaudia saepius demonstrat.*
>
> For where right as well as left hand are taken in the positive sense, they indicate either Judaea and the gentiles, as we have said above in the explanation of the bases, or the present and future life of the Church, or the happy and sad things of the world, or something of the sort, but where the right hand by itself is used in the positive sense, it more frequently stands for eternal joys.[210]

Following this logic, Bede assumed, as others had done, that the good thief who was crucified with Christ was crucified at Jesus's right hand.[211] The left was similarly interpreted as a symbol of infernal things: the 'eternal punishment' (*poena perpetua*) of the wicked 'is usually signified by the left side' (*per leuam solet designari*).[212]

The logic of the Dryhthelm narrative—with its travel towards the rising of the sun, and the arrangement of the damned on the left-hand side and the elect on the right-hand side—now begins to become clearer: the geography of the voyage tied together a number of exegetical positions. There is, however, an important difference between Bede, on the one hand, and Jerome and the Old English sources, on the other. Both Jerome and *Genesis B* located heaven and God in the south-east, and hell and Satan in the north-west. Bede, for some reason, located hell in the north-east. It may be—as Paul Salmon noted—that this difference stemmed from an alternative translation of *aquilo*, usually taken to mean 'north'.[213] *Aquilo* was also often used in late antiquity to refer to the wind coming from the north-east or the north-northeast. This is the meaning used by Orosius and by Isidore.[214] Most importantly, Pliny, from whom Bede derived so much knowledge of natural philosophy, stated that *aquilo* was located 'between [*septentrio*] and the sunrise on the solstice' (*interque eum et exortum solstitialem*).[215] In other

words, *aquilo* was the wind from the north-northeast.[216] In *De natura rerum* Bede followed Pliny in assigning *aquilo* to the north-northeast. The home of Satan, associated in the Vulgate with *aquilo* (Jer 1:14; Is 14:13), could therefore be justifiably connected with the north-east, rather than the north or the north-west. This was certainly how a later medieval Irish writer understood it: the author of the ninth- or tenth-century *Saltair na Rann*, in adapting Isaiah 14:13, depicted Satan stating that he will build his dwelling in the *north-east* of heaven.[217] On the other hand, Bede may simply have preferred this reading of Zechariah 14:4—after all, if Christ is facing east as he issues judgement (as per Jerome), it makes more sense for the left- and right-hand groups to be situated to the north-east and the south-east, respectively.

Extrapolation from the exegesis of Jerome and Gregory represents one possible inspiration for Bede's directional symbolism. There are hints at alternative (or complementary) possibilities. The habit of describing the location of paradise with reference to the sunrise was a commonplace of Christian poetry: we find it, for instance, in the *Alethia* of Claudius Marius Victorius and the *De spiritualis historiae gestis* of Avitus of Vienne.[218] I have discussed already Bede's possible familiarity with the *De aue phoenice* of Lactantius.[219] In that poem we find an evocative depiction of the eastern paradise in which the phoenix dwells: this land is 'in the remote east, where stands open the great gate of the eternal heaven, close to neither the summer nor winter sunrise, but to where the sun pours out the vernal daylight from the heavenly axis'.[220] This interesting idea—that paradise was located not in the direction of the sunrise at the summer or winter solstices but in the direction of sunrise at the equinox—seems a distant cousin to the kind of language used by Bede in describing Dryhthelm's journey. Closer to Wearmouth-Jarrow, we find another possible influence in the Ionan poem *Amra Coluim Chille*. In that work, composed around the year 600,[221] we are told that Columba now resides in heaven: according to one possible translation of a line in the second stanza, he now resides 'on the south of Zion' (*de deis Sion*).[222] Could this be an early attestation of the Insular tradition that heaven is located in the southern part of the east?[223]

To conclude, although the precise connotations of the compass directions given in the story of Dryhthelm's voyage are not entirely clear, there was a large body of ideas about the geography of heaven and paradise that strongly suggests that Bede's references to the north-east and the south-east were more than just pieces of picturesque narrative dressing. Christ's Ascension, the ascension of saints, the earthly and the celestial paradise: all were associated with the east and the rising of the sun. For some elusive reason (though probably inspired by Jerome and Gregory), early English and Anglo-Latin texts began to play around with this imagery, emphasizing the south-east rather than the east. It is clear that Bede's use of directions is in line with a particular strand of Christian tradition, even if its exact logic remains rather opaque to us.

Conclusion

What Bede's writings on the afterlife reveal is not a stringently dualistic universe, divided sharply between terrestrial and celestial realms, but a world in which those two categories bleed into one another. The interim paradise is close to heaven, but still in the upper *aer*; hell and the interim hell are embedded in the earth itself. A modern reader cannot but be struck by the solid and substantial character of Bede's otherworld (though these realms are still much more distant from the mundane world than they would be portrayed in later texts such as the *Nauigatio sancti Brendani*). Even in this material plane, the afterlife was not entirely shut off from this world: heaven made itself known at times through light and beautiful odour, while hell announced itself through abominable stench and visions of torment[224]; through almsgiving and prayers for the dead, meanwhile, those Christians still in this world could influence the lot of those spirits in the purgative hell. Bede's afterlife was thus a dynamic one, in which souls could move from one zone to another in real time. This aspect of immediacy is something worth bearing in mind: it means that the topography of the afterlife was not an esoteric, recherché topic of interest only to scholars. Instead, it was a vital part of the everyday life of the Northumbrian Church.

I have had occasion to comment on the fact that Bede was not prone to revision or emendation of his cosmological ideas. The cosmological vision laid out in *De natura rerum* was not questioned by him at any later stage. On such matters as angels, cosmogenesis and the soul he generally arrived at an opinion early and stuck by it—it is rare that he felt the need to rethink his ideas in these areas. When it came to the question of the afterlife, however, Bede was less decisive. In his early works, he provided information regarding the division of souls at death and the nature of the afterlife that he would later contradict. Even in later decades the details of the afterlife were much more less distinct than his ideas about creation or spirits. Perhaps this simply reflects the fact that Bede felt that such things were not for mortals to comprehend fully. As Sharon Rowley has noted, Bede's depiction of the voyage of Dryhthelm reflects his general eschatological views: 'he refuses to offer his readers certainty'.[225] We cannot expect the same level of detail and precision as we find in his discussion of more mundane issues. Yet there are clear threads that run through Bede's writings regarding the afterlife: almost all the details of Dryhthelm's voyage have parallels elsewhere in Bede's writings. Hell is subterranean, enveloped in darkness, filled with a horrible stench and punishments of fire and ice; the purgative hell is located close by, though it is not so deep, and mirrors hell in many respects. Heaven is located high above the material plane; the interim paradise is very close by, and takes the form of a beautiful, flower-filled plain, occupied by the white-clad souls of the just. These physical details may cause a modern reader to look askance, but, given the fundamentally physical nature of his conception of spiritual reality, there is nothing strange in Bede's belief that heaven and hell were so palpable and concrete.

Notes

1 J. Le Goff, *La Naissance du Purgatoire* (Paris, 1981); trans. A. Goldhammer, *The Birth of Purgatory* (Chicago, 1984).
2 For criticism of Le Goff's thesis, see C. Carozzi, 'La géographie de l'au-delà et sa signification pendant le haut moyen âge', *Popoli e paesi nella cultura altomedievale*, Settimane di studio del Centro italiano de studi sull'alto medioevo 29 (Spoleto, 1983), 423–81; A. Gurevich, 'Popular and Scholarly Medieval Cultural Traditions: Notes in the Margins of Jacques Le Goff's Book', *Journal of Medieval History* 9 (1983), 71–90; and the reviews of R.E. Lerner, *The American Historical Review* 87 (1982), 1374–5; A.E. Bernstein, *Speculum* 59 (1984), 179–83; P. Nautin, *Revue de l'histoire des religions* 202 (1985), 177–9; G.R. Edwards, *Journal of Ecclesiastical History* 36 (1985), 634–46.
3 C. Carozzi, *Le voyage de l'âme dans l'au-delà, d'après la littérature latine: Ve–XIIIe siècle*, Collection de l'École française de Rome, 189 (Rome, 1994); J. Bremmer, *The Rise and Fall of the Afterlife: The 1995 Read-Tuckwell Lectures at the University of Bristol* (London, 2002); P. Brown, 'Vers la naissance du purgatoire. Amnistie et pénitence dans le christianisme occidental de l'Antiquité tardive au Haut Moyen Age', *Annales Histoire, Sciences Sociales* 52 (1997), 1247–61; M. Dunn, 'Gregory the Great, the Vision of Fursey, and the Origins of Purgatory', *Peritia* 14 (2000), 238–54; M. Smyth, 'The Origins of Purgatory through the Lens of Seventh-Century Irish Eschatology', *Traditio* 57 (2003), 91–132; Kabir, *Paradise, Death and Doomsday*; Foxhall Forbes, 'Diuiduntur in quattuor'; I. Moreira, *Heaven's Purge: Purgatory in Late Antiquity* (Oxford, 2010).
4 Moreira, *Heaven's Purge*, 13.
5 A. Kabir, *Paradise, Death and Doomsday in Anglo-Saxon Literature* (Cambridge, 2001).
6 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 68–84).
7 Kabir, *Paradise, Death and Doomsday*; Foxhall Forbes, 'Diuiduntur in quattuor'.
8 J.E. Wright, *The Early History of Heaven* (New York, 2000), 186, 200–1.
9 Bremmer, *The Rise and Fall of the Afterlife*, 56–70.
10 Gregory, *Dialogi* 4.26 (ed. de Vogüé, SC 265, 84): 'luce clarius constat quia perfectorum iustorum animae, mox ut huius carnis claustra exeunt, in caelestibus sedibus recipiuntur'.
11 On the history of heaven in Latin Christian thought, see: Wright, *The Early History of Heaven*; C. McDannell and B. Lang, *Heaven: A History* (New Haven, CT, 2001); J.B. Russell, *A History of Heaven: The Singing Silence* (Princeton, 1997); A.E. McGrath, *A Brief History of Heaven* (Malden, MA, 2003); C. Muessig and A. Putter (eds), *Envisaging Heaven in the Middle Ages* (Abingdon, 2007).
12 R. Norman, 'Beyond the Ultimate Sphere: The Ascension and Eschatology', *Modern Believing* 42 (2001), 3–15.
13 G. Molland, 'Heaven, Hell, and Medieval Physics', in J.A. Aertsen and A. Speer (eds.), *Raum und Raumvorstellungen im Mittelalter* (Berlin, 1998), 121–9.
14 On the history of hell in Latin Christian thought, see: A.E. Bernstein, *The Formation of Hell: Death and Retribution in the Ancient and Early Christian Worlds* (London, 1993); Bernstein, *Hell and Its Rivals: Death and Retribution among Christians, Jews, and Muslims in the Early Middle Ages* (New York, 2017).
15 Ambrose, *In Lucam* 7.205–6 (ed. Adriaen, CCSL 14, 86); Origen, *De principiis* 2.10.4–5 (ed. Koetschau, 177–9).
16 Augustine, *DCD* 21.2–4 (ed. Dombart and Kalb, CCSL 48, 488–95).
17 Augustine, *DCD* 21.10 (ed. Dombart and Kalb, CCSL 48, 510–12).
18 Gregory, *Moralia* 15.29.35 (ed. Adriaen, CCSL 143A, 769–70).
19 *De ordine creaturarum* 13.7 (ed. Díaz y Díaz, 182).

20 M.F. Connell, '*Descensus Christi ad inferos*: Christ's Descent to the Dead', *Theological Studies* 62 (2001), 262–82, at 266–7.
21 Augustine, *DGAL* 12.33 (ed. Zycha, CSEL 28.1, 428); Augustine, *Retractationes* 2.24 (ed. Mutzenbecher, CCSL 57, 110).
22 Philippus Presbyteri, *Commentarii in librum Iob* (ed. Sichardus, 102): 'Sicut … inferi in profundo terram sunt, ita terrae in profundo aquarum sicut ait: qui creauit terram super aquas'.
23 *DOC* 13.8 (ed. Díaz y Díaz, 182): 'unde perspicue patet hunc locum qualemcumque sub terra esse, qui infernus inferior et terra obliuionis uocitatur'.
24 *Commemoratorium de Apocalypsis Iohannis apostoli* 5.13 (ed. Gryson, CCSL 107, 207); cf. *ibid*. 20.13 (ed. Gryson, 225).
25 Gregory, *Dialogi* 4.44.1 (ed. de Vogüé, SC 265, 156): 'hac de re temere definire non audeo'.
26 Gregory, *Dialogi* 4.44.1–3 (ed. de Vogüé, SC 265, 156–8).
27 Gregory, *Dialogi* 4.36.12 (ed. de Vogüé, SC 265, 122).
28 Hygeburc, *Vita Willibaldi*, 3 (ed. Holder-Egger, MGH Script. 15.1, 101).
29 J. Ntedika, *L'évolution de la doctrine du purgatoire chez saint Augustin* (Paris, 1966); M.P. Ciccarese, 'La più antiche rappresentazioni del purgatorio, dalla Passio Perpetuae alla fine del IX secolo', *Romanobarbarica* 7 (1982), 33–76; Kabir, *Paradise, Death and Doomsday*; Moreira, *Heaven's Purge*; H. Foxhall Forbes, 'The Development of the Notions of Penance, Purgatory and the Afterlife in Anglo-Saxon England', PhD thesis, University of Cambridge, 2009, 13–55; A. Merkt, *Das Fegefeuer: Entstehung und Funktion einer Idee* (Darmstadt, 2005).
30 Augustine, *Enchiridion* 110.9–13 (ed. Evans, CCSL 46, 108). A misinterpretation by Jacques le Goff has led to the repeated idea that Augustine was speaking of four groups in this passage: cf. Foxhall Forbes, 'Diuiduntur in quattuor', 662 n20.
31 Gregory, *Dialogi* 4.26 (ed. de Vogüé, SC 265, 84): 'quod de perfecta iustitia aliquid minus habuerunt'.
32 M. Smyth, 'The Seventh-Century Hiberno-Latin Treatise *Liber de ordine creaturarum*', *The Journal of Medieval Latin* 21 (2011), 137–222, at 154–5.
33 See discussion in Chapter 8.
34 Augustine, *Ep*. 187.6 (ed. A. Goldbacher, CSEL 57, 86).
35 J. Delumeau, *History of Paradise: The Garden of Eden in Myth and Tradition*, trans. M. O'Connell (New York, 1995), 30.
36 Isidore, *De differentiis* 2.12 (ed. Sanz, CCSL 111A, 23–4).
37 Julian, *Prognosticon* (ed. Hillgarth, CCSL 115).
38 *De ordine creaturarum* 6.9 (ed. Díaz y Díaz, 126).
39 *De ordine creaturarum* 6.10 (ed. Díaz y Díaz, 126).
40 Moreira, *Heaven's Purge*, 18–20.
41 Augustine, *Enchiridion* 18.69 (ed. Evans, CCSL 46, 87).
42 Gregory, *Dialogi* 4.41 (ed. de Vogüé, SC 265, 148).
43 An exception is a tentative statement by Augustine which seems to suggest that these fires may burn in the interval between individual death and final resurrection: Augustine, *DCD* 21.26 (ed. Dombart and Kalb, CCSL 48, 789–9). Ntedika, *L'évolution de la doctrine du purgatoire*, contends that Augustine had some conception of purging fires immediately after death but see R. Atwell, 'Aspects in St. Augustine of Hippo's Thought and Spirituality concerning the State of the Faithful Departed, 354–430', in D. Loades (ed.), *The End of Strife: Papers Selected from the Proceedings of the Commission Internationale d'Histoire Ecclésiastique Comparée* (Edinburgh, 1984), 3–13, at 8.
44 D. Shanzer, 'Bible, Exegesis, Literature, and Society', *The Journal of Medieval Latin* 18 (2008), 141–57; D. Shanzer, 'Jerome, Tobit, Alms, and the *Vita Aeterna*',

in A. Cain and J Lössl (eds.), *Jerome of Stridon: His Life, Writings and Legacy* (Farnham–Burlington, VT, 2009), 87–104; J. Ntedika, *L'évolution de la doctrine du purgatoire*.

45 Jerome, *Ep*. 66.5 (ed. Hilberg, CSEL 54, 653); Shanzer, 'Jerome, Tobit, Alms, and the *Vita Aeterna*'; Shanzer, 'Bible, Exegesis, Literature, and Society', 144–7.

46 Dunn, 'Origins of Purgatory', 245.

47 *Passio Perpetuae et Felicitatis* 7.9–10 (ed. Amat, SC 417, 130). Cf. Ntedika, *L'évolution de la doctrine du purgatoire,* 86–7; Carozzi, *Le voyage de l'âme dans l'au-delà*, 25; Merkt, *Das Fegefeuer*, 15–33; Ciccarese, 'Rappresentazioni', 38; Foxhall Forbes, 'Diuiduntur in quattuor', 17–18. Bede was familiar with the *Passio*: Lapidge, *Anglo-Saxon Library*, 228.

48 Boniface, *Epistola* 115 (ed. Tangl, MGH Epistolae Selectae 1, 248); Bede, *HE* 4.22 (ed. Lapidge, SC 490, 330–42), 5.12 (ed. Lapidge, SC 491, 78).

49 Others had taken a less severe view of the eternity of a sentence to hell, Brown, 'Vers la naissance', 1252–3.

50 *Vita Gregorii papae* (ed. Colgrave, 124).

51 Dunn, 'Origins of Purgatory', 251.

52 Kabir, *Paradise, Death and Doomsday*; Foxhall Forbes, 'Diuiduntur in quattuor'.

53 On Bede's understanding of the six, seven or eight World-Ages, see Wallis, *Bede: The Reckoning of Time*, 354–66.

54 Bede, *In Luc.* 3.9.28 (ed. Hurst, CCSL 120, 204).

55 Bede, *IG* 1.2 (ed. Jones, CCSL, 118A, 39). Similar comments are made in Bede, *In Luc.* 5.16.22 (ed. Hurst, CCSL 120, 303–4); Bede, *In prouerbia Salomonis* 1.1.33 (ed. Hurst, CCSL 119B, 33).

56 Bede, *Hom*. 1.11 (ed. Hurst, CCSL 122, 74; trans. Martin and Hurst, 105).

57 Bede, *Retractatio in Actus apostolorum* 2.24 (ed. Laistner, CCSL 121, 112–13). I disagree here with Foxhall Forbes, who argues that Bede thought of the *sinus Abrahae* as heaven proper: 'Diuiduntur in quattuor', 681.

58 The homilies are difficult to date, but are generally held to be the product of Bede's later years: Hurst, *Bedae Venerabilis opera homiletica*, vii; Brown, *Companion to Bede*, 74; J. McClure, 'Bede and the Life of Ceolfrid', *Peritia* 3 (1984), 71–84, at 82–3; Martin, *Bede the Venerable: Homilies on the Gospels*, I, xi. The *Retractatio* is also likely a late work, from between 725 and 731: M.L.W. Laistner, *Bedae Venerabilis Expositio Actuum Apostolorum et Retractatio*, xiii–xvii.

59 Bede, *In epistulas septem catholicas*, 2.3.18 (ed. Hurst, CCSL 121, 247).

60 Bede, *Hom*. 1.2 (ed. Hurst, CCSL 122, 13; trans. Martin and Hurst, 17, modified): 'continuo beata paradisi requie suscipiuntur expectantes in magno gaudio in magnis congaudentium choris quando recepto corpore ueniant et appareant ante faciem dei'.

61 Bede, *Hom*. 1.2 (ed. Hurst, CCSL 122, 13).

62 On the details of Dryhthelm's death and resurrection, see above, 103–4.

63 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 72): 'non enim hic infernus est ille, quem putas'.

64 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 76): 'non hoc est regnum caelorum quod autumas'.

65 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 78): 'preces uiuentium et elemosynae et ieiunia et maxime celebratio missarum'.

66 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 78): 'in quo quicumque semel inciderit, numquam inde liberabitur in aeuum'.

67 Bede, *HE* 4.22 (ed. Lapidge, SC 490, 312): 'etsi nunc in alia uita essem, ibi anima mea per intercessiones eius solueretur a poenis'.

68 Bede, *HE* 3.19 (ed. Lapidge, SC 490, 102–14). See discussion above, 103–4.

69 See above, 204 n43.

70 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 7; trans. Kendall, 72): 'credens … corporalem uero, uisibilem et corruptibilem creaturam latius ex ordine describeret'.
71 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 4; trans. Kendall, 69): 'ab omni huius mundi uolubilis statu secretum, diuinae gloria presentiae manet semper quietum'.
72 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 6). See above, Chapter 3, 64.
73 Bede, *IG* 1.1 (ed. Jones, CCSL 118A, 7–8; trans. Kendall, 73): 'cuius beatissima uisione mox creati in caelis caelorum angeli iam perfrui coeperant'.
74 Bede, *DTR* 5 (ed. Jones, CCSL 123B, 286).
75 Bede, *DNR* 5–8 (ed. Jones, CCSL 123A, 196–9).
76 For instance, Bede, *HE* 4.18 (ed. Lapidge, SC 490, 306); Bede, *VCM* 34.750 (ed. Jaager, 115). This was a common phrase in Christian poetry, used to evoke the celestial abode of the holy dead; see, for instance, Avitus of Vienne, *De spiritualis historiae gestis* 4.197 (ed. Peiper, MGH Auct. ant. 6.2, 241); Venantius Fortunatus, *Vita Martini* 1.5.421, 2.5.442, 4.5.237 (ed. Leo, MGH Auct. ant.4.1, 310, 328, 355); Dracontius, *De laudibus Dei* 1.423, 1.674, 2.5, 2.16, 2.468 (ed. Vollmer, MGH Auct. ant. 14, 19, 30, 34, 50, 53). It was also in use in Anglo-Saxon England, as attested in an epitaph commemorating Cuth (or Cuthbert) and Sigberht, who are described as dwelling with the angels and 'placed beyond the stars' (*super astra locati*): Lapidge, 'Remnants', 811; P. Sims-Williams, *Religion and Literature in Western England, 600–800* (Cambridge, 1990), 357–8.
77 As in his interpretation of Isaiah 14:13–15, for instance: Bede, *DTR* 5 (ed. Jones, CCSL 123B, 287).
78 Bede, *In ascensione Domini* (ed. Fraipont, CCSL 122, 419–23).
79 As stated, for instance, in Bede, *Hom.* 1.7 (ed. D. Hurst, CCSL 122, 47).
80 Gregory, *Homiliae in Evangelia* 2.29.5 (ed. Etaix, CCSL 141, 249–50).
81 Bede, *Hom.* 2.15 (ed. D. Hurst, CCSL 122, 286). Bede also emphasized the fact that Christ ascended to the *caelum superius* rather than any other 'heaven' in his commentary on Luke: Bede, *In Lucam* 4.12 (ed. Hurst, CCSL 120, 256).
82 Emphasis mine. The same phrasing of 4 Kings 2:11 appears in the surviving leaves of a pandect produced at Wearmouth-Jarrow: Marsden, 'Bede's Contribution to Ceolfrith's Bibles', 79–83.
83 Bede, *Hom.* 2.15 (ed. D. Hurst, CCSL 122, 286). The important point that Christ ascended above the heaven of the *aer* would be intriguingly translated by Cynewulf in the next century—in *Christ II* he wrote of Christ ascending 'ofer heofona gehlidu', 'over the lids of heaven' (P. Clemoes, 'Cynewulf's Image of the Ascension', in R.E. Bjork (ed.), *The Cynewulf Reader* (New York, 2001), 109–32, at 121 n25).
84 Bede, *Hom.* 2.15 (ed. D. Hurst, CCSL 122, 287).
85 Bede, *Expositio actuum apostolorum* 1 (ed. Laistner, CCSL 121, 9).
86 See above, 179.
87 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 210).
88 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 216).
89 Bede, *HE* 4.21 (ed. Lapidge, SC 490, 328).
90 Bede, *HE* 4.21 (ed. Lapidge, SC 490, 330).
91 Bede, *VCP* 4 (ed. Colgrave, 164).
92 Bede, *VCM* 4.128–34 (ed. Jaager, 67–8).
93 Bede, *VCP* 34 (ed. Colgrave, 262).
94 Bede, *VCP* 28 (ed. Colgrave, 250): 'angelico ministerio pariter ad regnum coeleste translati'.
95 Bede, *HE* 4.3 (ed. Lapidge, SC 490, 210).
96 Bede, *DNR* 50 (ed. Jones, 233). The point is perhaps clearer in Isidore's slightly longer passage on the same theme: Isidore, *De natura rerum* 47.4 (ed. Fontaine, 323). Mt Etna can probably therefore be added to the list of signs to be found in nature and intended for humanity's edification Chapter 6, 164–8.

97 Cf. Darby, *Bede and the End of Time*, 139–43.
98 Bede, *In epistulas septem catholicas* 2.3.19 (ed. Hurst, CCSL 121, 249); Bede, *In primam partem Samuhelis* 1.2.6 (ed. Hurst, CCSL 119, 23–4); Bede, Retractatio 2.24 (ed. Laistner, CCSL 121, 113).
99 J. Kramer, *Between Earth and Heaven: Liminality and the Ascension of Christ in Anglo-Saxon Literature* (Manchester, 2014), 114.
100 Bede, *In ascensione Domini* (ed. Fraipont, CCSL 122, 419–23). For discussion of the descent-ascent motif in Bede, among other writers, see G.H. Brown, 'The Descent-Ascent Motif in "Christ II" of Cynewulf', *The Journal of English and Germanic Philology* 73 (1974), 1–12.
101 For discussion, see L. Whitbread, 'A Study of Bede's *Versus de die iudicii*', *Philological Quarterly* 23 (1944), 193–221; Darby, *Bede and the End of Time*, passim.; M. Lapidge, 'Bede and the "Versus de die iudicii"', in A. Bihrer and E. Stein (eds), *Nova de Veteribus: Mittel- und neulateinische Studien für Paul Gerhard Schmidt* (Munich and Leipzig, 2004), 103–11.
102 Bede, *De die iudicii* 111 (ed. Fraipont, CCSL 122, 442–3; trans. Allen and Calder, 211): 'fugiunt solatia cuncta'.
103 *De die iudicii* 113–16 (ed. Fraipont, CCSL 122, 442–3; trans. Allen and Calder, 211): 'Laetitiae facies iam nulla uidebitur illic / Sed dolor et gemitus, stridor, pauor et timor horrens / Taedia, tristitiae, trux, indignatio, languor / Errantesque animae flammis in carcere caeco'.
104 *De die iudicii* 109 (ed. Fraipont, CCSL 122, 442–3; trans. Allen and Calder, 211).
105 Gregory, *Moralia* 9.65.97 (ed. Adriaen, CCSL 143, 525).
106 Bede, *DDI* 103; 105 (ed. Fraipont, CCSL 122, 442; trans. Allen and Calder, 211).
107 Bede, *DDI* 96–7 (ed. Fraipont, CCSL 122, 442–3; trans. Allen and Calder, 211).
108 Bede, *EA* 2.8 (ed. Gryson, CCSL 121A, 337.
109 Whitbread, 'Bede's *Versus de Die Iudicii*', 211.
110 Jerome, *Commentarii in euangelium Matthaei* 1, line 1723 (ed. Hurst and Adriaen, CCSL 77, 71): 'duplicem … esse gehennam, nimii ignis et frigoris, in iob plenissime legimus'. Noted by Carozzi, *Le Voyage*, 242; Bremmer, *The Rise and Fall of the Afterlife*, 174 n62.
111 Isidore, *Etymologiae* 14.9.9 (ed. Lindsay).
112 *Visio Pauli* 42 (ed. Silverstein and Hilhorst, 156–7).
113 *Glosa Psalmorum ex traditione seniorum* 111.10 (ed. Boese, 2:71); *Breuiarium in Psalmos* 111 (PL 26, 1171): 'Per stridorem dentium frigus intellegitur … quia et frigus et calor erit ibi'.
114 *Commemoratorium de Apocalypsis Iohannis apostoli* 8.7 (ed. Gryson, CCSL 107, 213; trans. Gumerlock, 28).
115 Bede, *In Luc*. 4.13.28 (ed. Hurst, CCSL 120, 272): 'fletus de ardore stridor dentium solet excitari de frigore'.
116 Bede, *In prouerbia Salomonis* 3.31.21 (ed. Hurst, CCSL 119B, 157): 'fletum quippe oculis ignis et fumus, stridorem uero dentibus solet frigus gignere'.
117 Orientius, *Commonitorium* 2.277–280 (ed. Ellis, CSEL 16, 238). It is difficult to be certain whether or not Orientius's poem was known to Bede. Jaager, in his edition of Bede's metrical Life of Cuthbert, noted one possible parallel between Bede's text and the earlier work (Jaager, *Bedas metrische Vita sancti Cuthberti*, 69–70). The language used by Bede in *De die iudicii* is certainly very similar to Orientius's depiction of hell, but it is not conclusive proof by any means.
118 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 70–2; trans. Colgrave and Mynors, 489–91, modified).
119 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 72; trans. Colgrave and Mynors, 491); the quotation is from Vergil, *Aeneid* 6.268 (ed. Ribbeck, 487).
120 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 76; trans. Colgrave and Mynors, 493).
121 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 77–8; trans. Colgrave and Mynors, 495).

122 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 80).
123 Thus M. Miller, 'Drythelm's Journey to the Other World', *Comitatus* 2 (1971), 3–15, at 7. This assumption also underlies much of the scholarship on 'vision literature' and out-of-body experiences in the middle ages, where the Dryhthelm narrative has received a lot of attention. See above, 120 nn90–2 and 121 n100.
124 Foxhall Forbes, 'Diuiduntur in quattuor'; Rabin, 'Bede, Dryhthelm, and the Witness to the Other World'; Rowley, 'Role and Function'.
125 See the useful comments in Sims-Williams, *Religion and Literature*, 249; Foxhall Forbes, 'Diuiduntur in quattuor', 665–6; P. Carrell, *Jesus and the Angels: Angelology and the Christology of the Apocalypse of John* (Cambridge, 1997), 17.
126 Foxhall Forbes, 'Diuiduntur in quattuor'; Bede, *Hom.* 1.2 (ed. Hurst, CCSL 122, 7–13); Gregory, *Moralia* 26.27.49–52 (ed. Adriaen, CCSL 143B, 1304–6).
127 Plummer, *Venerabilis Bedae opera historica*, 2:294–8; Sims-Williams, *Religion and Literature*, 243–72; G.D. Schmidt, *The Iconography of the Mouth of Hell: Eighth-Century Britain to the Fifteenth Century* (Selinsgrove, PA, 1995), 94; A. Rabin, 'Bede, Dryhthelm, and the Witness to the Other World: Testimony and Conversion in the *Historia ecclesiastica*', *Modern Philology* 106 (2009), 375–98, at 396; A. diPaolo Healey, 'Apocalypse of Paul', in F.M. Biggs (ed.), *Sources of Anglo-Saxon Literary Culture: The Apocrypha* (Kalamazoo, MI, 2007), 67–70, 68; Silverstein, *Visio Sancti Pauli*, 87–8; Bremmer, *The Rise and Fall of the Afterlife*, 174 n65. Others, though they draw attention to the similarities between Dryhthelm's voyage and the apocrypha, have felt that direct influence is not necessarily the most likely explanation (for instance, McCready, *Miracles and the Venerable Bede*, 181–3).
128 Bede, *In Sam.* 2.11 (ed. Hurst, CCSL 119, 96); Bede, *In Luc.* 5.17 (ed. Hurst, CCSL 120, 317).
129 Carozzi, 'La géographie de l'Au-delà et sa signification pendant le Haut Moyen Âge'.
130 Kabir, *Paradise, Death and Doomsday*, 87.
131 S. Foot, 'Anglo-Saxon "Purgatory"', in P.D. Clarke and T. Claydon (eds), *The Church, the Afterlife and the Fate of the Soul* (Woodbridge, 2009), 87–96, at 92.
132 Foot, 'Anglo-Saxon Purgatory', 94 (emphasis mine).
133 Sims-Williams, *Religion and Literature*, 259; Carozzi, *Le voyage de l'âme*, 279.
134 94r, edited in Rackham, *Transitus Beati Fursei*, 42.
135 *Visio s. Pauli* (Arnhem) 11 (ed. Silverstein and Hilhorst, 83).
136 Gregory of Tours, *Historia Francorum* 7.1 (ed. Krusch and Levison, MGH Scriptorum rerum Merovingicarum 1.1, 325).
137 McCready, *Miracles and the Venerable Bede*, 181–2. Miller, 'Drythelm's Journey', 8.
138 Bede, *HE* 5.12 (ed. Lapidge, SC 491, 82).
139 Sims-Williams, *Religion and Literature*, 261; Bremmer, *The Rise and Fall of the Afterlife*, 174 n65.
140 *Glosa Psalmorum ex traditione seniorum* 54.24 (ed. Boese, 1:231).
141 *Commemoratorium de Apocalypsi Iohannis apostoli* 9.1 (ed. Gryson, CCSL 107, 214).
142 Caesarius, *Sermo* 46.6 (ed. Morin, CCSL 103, 209); 167.5 (ed. Morin, CCSL 104, 685); 206.3 (ed. Morin, CCSL 104, 826)
143 The link has been noted in Carozzi, *Le voyage de l'Âme*, 240–1.
144 Pliny, *NH* 2.106 (LCL 330, 360); Vergil, *Georgica* 1.472–3 (ed. Ribbeck, 94); Aldhelm, *Prosa de uirginitate* (ed. Gwara, CCSL 124A, 593).
145 Bede, *IG* 4.19 (ed. Jones, CCSL 118A, 226); Bede, *EA* 2.9.17 (ed. Gryson, CCSL 121A, 357).
146 Gregory, *Dial.* 4.39 (ed. de Vogué, SC 265, 138).
147 Gregory, *Dial.* 4.37.8 (ed. de Vogué, SC 265, 130).

148 Evagrius, *Vita Antonii* 63 (ed. Bertrand, 181); Sulpicius Severus, *Vita Martini* 24.6 (ed. Fontaine, SC 133, 309).
149 Bede, *DNR* 50 (ed. Jones, 233).
150 Gregory the Great, *Moralia* 9.65 (ed. Adriaen, CCSL 143, 525).
151 See above, 119.
152 Miller, 'Dryhthelm's Journey', 8–10; Carozzi, *Le Voyage*, 237, 239; Kabir, *Paradise, Death and Doomsday*, 101–2; Sims-Williams, *Religion and Literature*, 266 n82; McCready, *Miracles and the Venerable Bede*, 184–6.
153 Gregory, *Dial.* 4.37.8 (ed. de Vogüé, SC 265, 130); Bede, *HE* 5.12 (ed. Lapidge, SC 491, 76).
154 Wright, *Early History of Heaven*, 188–9.
155 Bede, *De Templo* 2.497–9 (ed. Hurst, CCSL 119A, 204; trans. Connolly, 81): 'Quid per lilia nisi supernae claritas patriae atque immortalitatis floribus redolens paradisi designatur amoenitas?'
156 Above, Chapter 3, 64–5.
157 Bede, *Hom.* 2.15 (ed. Hurst, CCSL 122, 287).
158 Bede, *IG* 1.2 (ed. Jones, CCSL 118A, 46): 'unde nec aquae diluuii, quae totam nostri orbis superficiem altissime cooperuerunt ad eum peruenire potuerunt'.
159 Scafi, *Mapping Paradise*, 49–50, 174–5.
160 *De ordine creaturarum* 6.9–10 (ed. Díaz y Díaz, 126). See above, 179.
161 Above, Ch. 3.
162 Foot, 'Anglo-Saxon "Purgatory"', 91.
163 Carozzi, *Le Voyage de l'Âme*, 290, with diagram at 238.
164 As recognized by, for instance, Bremmer, *Rise and Fall of the Afterlife*, 97; Miller, 'Drythelm's Journey to the Other World', 7.
165 Sims-Williams, *Religion and Literature*, 259; A. diPaolo Healey, *The Old English Vision of St. Paul* (Cambridge, MA, 1978), 56, also connects this image with the influence of the *Visio Pauli*.
166 *Visio Pauli* 31 (ed. Silverstein and Hilhorst, 136–7).
167 Bede, *HE* (ed. Lapidge, SC 490, 82).
168 Pliny, *NH* 2.119–20 (ed. Mayhoff, 1:170–1).
169 Jerome, *In Hiezechielem* 12.40 (ed. Glorie, CCSL 75, 573); Gregory, *Homiliae in Hiezechihelem prophetam* 2.10.8 (ed. Adriaen, CCSL 142, 385).
170 Jerome, *In Hiezechielem* 13.44 (ed. Glorie, CCSL 75, 644); Gregory, *Homiliae in Hiezechihelem prophetam* 2.3 (ed. Adriaen, CCSL 142, 237).
171 The classic study is F.J. Dölger, *Sol Salutis: Gebet und Gesang im christlichen Rücksicht auf die Ostung in Gebet und Liturgie* (Münster, 1925).
172 Primasius, *Commentarius in Apocalypsin* 2.7 (ed. Adams, CCSL 92, 106); *Commemoratorium de Apocalypsi Iohannis apostoli* 7.2 (ed. Gryson, CCSL 107, 210).
173 *Passio Perpetuae et Felicitatis* 11.2 (ed. Amat, SC 417, 142).
174 Gregory, *Dialogi* 2.37 (ed. de Vogüé, SC 260, 244): 'uia recto orientis tramite ab eius cella in caelum usque tendebatur'.
175 Adomnán, *Vita Columbae* 3.23 (ed. Anderson and Anderson, 534).
176 The Latin antiphon *O Oriens* (ed. Hesbert, *Corpus antiphonalium officii* 1:28–9). Bede was likely familiar with this antiphon, and with other O Antiphons: according to Cuthbert's letter, Bede sang the antiphon *O rex gloriae*—a piece modelled on the O Antiphons—on his deathbed ('O Antiphons' s.v. *Medieval France: An Encyclopedia*; Cuthbert, *Epistola de obitu Bedae* (ed. Colgrave and Mynors, 582). The evidence of the Antiphonary of Bangor shows that similar sentiments were expressed in an Insular context by the seventh century (ed. Warren, 19).
177 J. Daniélou, *The Bible and the Liturgy* (Notre Dame, IN, 1956), 30–3; C. Vogel, '*Sol aequinoctialis*: Problèmes et technique de l'orientation dans le culte chrétien', *Revue des Sciences Religieuses* 36 (1962), 175–211; C. Vogel, 'L'orientation vers

l'est du célébrant et des fidèles pendant la célébration eucharistique', *L'Orient Syrien* 9 (1964) 26–9; C. Vogel, 'Versus ad orientem', *La Maison-Dieu* 70 (1962), 67–99; G.M. Lukken, *Original Sin in the Roman Liturgy* (Leiden, 1973), 90–2; Dölger, *Sol Salutis*. Comments by early Christian writers like Tertullian and Clement of Alexandria suggest the ubiquity of east-facing worship by the second century (Tertullian, *Ad Nationes* 1.13; Tertullian, *Apologeticum* 16; Clement of Alexandria, *Stromata* 7.7). Explicit instructions that the celebrant turn to the east during mass are found in a mid-eighth-century Frankish recension of the *Ordo romanus primus* (Andrieu, *Les Ordines romani*, II, 84; Vogel, 'Sol aequinoctialis', 183–4). Even when a church building was not built facing east, there is evidence that during the liturgy, those praying would face east (J. Wilkinson, 'Orientation, Christian and Jewish', 'Orientation, Christian and Jewish', *Palestine Exploration Quarterly* 117 (1984), 16–30, at 16–17, 22, 26–9).

178 Ambrose, *De mysteriis* 2.7 (ed. Faller, CSEL 73, 91).

179 *Hymnus de Die Iudicii* (ed. Bayless and Lapidge, 277): 'Deus ab austro apparebit'.

180 'North' s.v., *Dictionary of Biblical Imagery*; P. Salmon, 'The Site of Lucifer's Throne', *Anglia* 81 (1963), 118–23; T.D. Hill, 'Some Remarks on "The Site of Lucifer's Throne"', *Anglia* 87 (1969), 303–11; A.L. Kellogg, 'Satan, Langland, and the North', *Speculum* 24 (1949) 413–14.

181 Felix, *Vita Guthlaci* 31 (ed. Colgrave, 104).

182 See below, Ch. 8.

183 Arnobius, *Comentarii in Psalmos* 19 (ed. Daur, CCSL 25, 26).

184 Augustine, *Sermo* 249 (PL 38, 1162; trans. Hill, 115): 'post resurrectionem in dextera inueniemini. ibi nullus est malus'.

185 Jerome, *In Zachariam* 3.14 (ed. Adriaen, CCSL 76A, 881).

186 'South', 'East', 'North' s.v., *Dictionary of Biblical Imagery*.

187 Jerome, *In Zachariam* 3.14 (ed. Adriaen, CCSL 76A, 747–900).

188 Jerome, *In Zachariam* 3.14 (ed. Adriaen, CCSL 76A, 882): 'manifeste de secundo saluatoris praedicatur aduentu'.

189 Jerome, *In Zachariam* 3.14 (ed. Adriaen, CCSL 76A, 881): 'ad sinistram stabit Circumcisio, ad dextram populus Christianus'.

190 Gregory, *Moralia* 9.11.17 (ed. Adriaen, CCSL 143, 468), 26.27.51 (ed. Adriaen, CCSL 143B, 1305), 27.27.51 (ed. Adriaen, CCSL 143B, 1371–2).

191 Gregory, *Moralia* 2.20.38 (ed. Adriaen, CCSL 143, 82–3), 20.22.48–9 (ed. Adriaen, CCSL 143A, 1038–40).

192 Gregory, *Moralia* 12.4 (ed. Adriaen, CCSL 143A, 631).

193 Foxhall Forbes, 'Diuiduntur in quattuor'.

194 A.S. Cook, *The Christ of Cynewulf: A Poem in Three Parts* (Boston, 1900), 180–1; Salmon, 'The Site of Lucifer's Throne'; Hill, 'Some Remarks on "The Site of Lucifer's Throne"'; J.F. Vickrey, 'The Vision of Eve in *Genesis B*', *Speculum* 44 (1969), 86–102, at 91–3.

195 *Christ III*, line 900 (ed. Cook, 35).

196 *Genesis B*, line 667 (ed. Doane, 224).

197 *Old English Martyrology* (ed. Herzfeld, 62); Healey, *The Old English Vision of St. Paul*, 56.

198 Stephen of Ripon, *Vita Wilfridi* 68 (ed. and trans. Colgrave, 148–9).

199 Bede, *In Luc*. 4.prol. (ed. Hurst, CCSL 120, 231).

200 Bede, *EA* 1.9 (ed. Gryson, CCSL 121A, 309).

201 Bede, *De tab*. 3.768 (ed. Hurst, CCSL 119A, 112); Bede, *In Ez*. 3.1025–9 (ed. Hurst, CCSL 119A, 364); Bede, *IG* 2.8 (ed. Jones, CCSL 118A, 127); Bede, *In cant*. 3.334–37 (ed. Hurst, CCSL 119B, 253); Bede, *In canticum Abacuc* 3.3 (ed. Hudson, CCSL 119B, 387).

202 Bede, *EA* 1.9 (ed. Gryson, CCSL 121A, 309); Bede, *In Ez*. 3.579–84 (ed. Hurst, CCSL 119A, 353).

203 Bede, *IG* 4.19 (ed. Jones, CCSL 118A, 226; trans. Kendall, 304): 'manifestationem ultimi designat examinis quando, iustis omnibus ereptis, impios repentinus obprimet interitus'.
204 Bede, *IG* 4.20.1 (ed. Jones, CCSL 118A, 231); cf. Bede, *In Sam*. 4.30 (ed. Hurst, CCSL 119, 264).
205 Bede, *In Regum librum XXX quaestiones* 12 (ed. Hurst, CCSL 119, 304); Josephus, *Antiquitates Iudaicae* 3.6.3 (ed. Pollard et al.).
206 For discussion see: Kendall, *Bede: On Genesis*, 33.
207 Bede, *IG* 1.1.17–18 (ed. Jones, CCSL 118A, 18).
208 Ward, *Venerable Bede*, 104–5.
209 See below, 000.
210 Bede, *De templo* 2.20 (ed. Hurst, CCSL 119A, 222; trans. Connolly, 102–3).
211 Bede, *In Luc*. 6.23 (ed. Hurst, CCSL 120, 402).
212 Bede, *IG* 3.14 (ed. Jones, CCSL 118A, 188).
213 Salmon, 'The Site of Lucifer's Throne', 120.
214 Orosius, *Historiae* 1.2.14 (ed. Arnaud-Lindet, 1:16); Isidore, *Etymologiae* 13.11.3 (ed. Lindsay).
215 Pliny, *NH* 2.46 (LCL 330, 260).
216 See W.D. Cooley (ed.), *Larcher's Notes on Herodotus*, cro 2 vols. (London, 1844), II, 328, for discussion of whether Pliny originally meant the north-east.
217 *Saltair na Rann* (*Leabhar Breac*) d (ed. MacCarthy, *Codex palatino-vaticanus*, 44).
218 Claudius Marius Victorius, *Alethia* 1.225 (ed. Hovingh, CCSL 128, 125); Avitus of Vienne, *De spiritualis historiae gestis* 1.211–7 (ed. Peiper, MGH Auct. ant. 6.2, 209).
219 Above, 77.
220 Lactantius, *De aue phoenice* 1–4 (ed. Brandt, CSEL 27.1, 135): 'in … oriente remotus / qua patet aeterni maxima porta poli / nec tamen aestiuos hiemisue propinquus ad ortus / sed qua sol uerno fundit ab axe diem'.
221 Jacopo Bisagni has recently argued for a much later dating, or at least a late re-working of earlier material: J. Bisagni, 'The Language and the Date of *Amrae Coluimb Chille*', in S. Zimmer (ed.), *Kelten am Rhein: Akten des dreizehnten Internationalen Keltologiekongresses* (Mainz, 2009), 1–11; J. Bisagni, *Amrae Coluimb Chille: A Critical Edition* (Dublin, 2019).
222 *Amra Choluim Chille* 2.7 (ed. and trans. Stokes, 'The Bodleian Amra Choluimb Chille', 160–1). The *Amra* is a notoriously difficult text to interpret. Other translations include Clancy and Márkus, *Iona*, 105 ('the prophet has settled at God's right hand in Sion') and Bisagni, *Amrae Coluimb Chille*, 267 ('the prophet, let him sit at the right hand of the God of Sion').
223 Later Irish texts of the tenth through twelfth centuries located paradise in the south-east—*Lebor gabála Erenn* 101 (ed. Macalister, 164–5); *Fís Adamnáin* (ed. Windisch, 172)—or hell in the north-east—*Bretha Étgid* (ed. Binchy, 927.23–7); *Saltair na Rann* (Leabhar Breac) d (ed. MacCarthy, 44); cf. D. Bracken, 'The Fall and the Law in Early Ireland', in P. Ní Chatháin and M. Richter (eds), *Ireland and Europe in the early Middle Ages: texts and transmissions / Irland und Europa im früheren Mittelalter: Texte und Überlieferung* (Dublin, 2002), 147–69, at 168. Were they simply following the example set by Bede or were both Bede and the Irish texts drawing on an earlier tradition, a tradition perhaps represented by this ambiguous phrase from the *Amra Choluim Chille*? One possible explanation for the emergence of this idea is the influence of the Irish language, which may have served to further reinforce the idea that left accords with north and right with south: one element felt to be characteristic of Hiberno-Latin is the use of *sinistralis* for 'north' and *dextralis* for 'south', a practice seemingly derived from Old Irish itself, which has one word, *dess*, for both right and south, and another, *túaid*, for left and north (Stancliffe, 'Red, White and

Blue Martyrdom', 24 n18)—the same holds true for *dess* ('south'/'right'), hence the alternative translations in the previous footnote (eDIL s.v. dess, <https://dil.ie/15783>). Apart from this possible reference in the *Amra Choluim Chille*, however, I have not been able to locate any allusions to the idea in any Irish sources from before the tenth century. If Bisagni's re-dating of much of the *Amra* is correct, or if preference is given to a different translation than Stokes's, then Bede's work would stand as the earliest Insular reference to this idea.

224 Heaven: Bede, *VCP* 7 (ed. Colgrave, 176–8), *VCP* 42 (ed. Colgrave, 292); *HE* 3.8 (ed. Lapidge, SC 490, 56); *HE* 4.7 (ed. Lapidge, SC 490, 238); *HE* 4.8 (ed. Lapidge, SC 490, 240); *HE* 4.23 (ed. Lapidge, SC 490, 328); Bede, *Vita Felicis* 791 (PL 94); Bede, *Martyrologium*, KL. Nov., Passio s. Benigni (ed. Quentin, 62); Bede, *Martyrologium*, KL. Nov., Passio s. Caesarii (ed. Quentin, 65); hell: *HE* 5.13 (ed. Lapidge, SC 491, 90–2).

225 Rowley, 'Role and Function', 183.

8 The end of the world and after

Attempts to rationalize the mechanisms of the Apocalypse are a recurring theme in European intellectual history. In the seventeenth and eighteenth centuries, for instance, thinkers would attempt to explain the mechanics of the end of the world through the lends of the 'new science' of the day, fitting the biblical narrative to contemporary scientific concepts like atomistic theory and the Copernican model of the cosmos.[1] A millennium earlier, Bede was engaged in a similar process, attempting to understand the narrative of Revelation according to contemporary cosmological models. Conjectures about what natural phenomena and physical consequences might accompany the eschaton had been part of apocalyptic Christian thought since its inception, but Bede brought a particularly well-realized vision of nature and cosmos to the subject and this allowed him to expand significantly on the sparse details provided in Scripture. As we shall see in this chapter, his apocalyptic thought incorporated his ideas about physics and cosmology into an integrated and highly detailed account of the end of the *mundus*. We should not be surprised at this attention to detail. The Apocalypse was very much a vivid reality for Bede.[2] He believed that he was living in the sixth and final age of the world, and that the physical universe would soon be destroyed by fire, after which it would be replaced by a renewed and eternal universe. Although he was extremely careful not to speculate on the exact date of the end, his understanding of the contemporary world was firmly situated in the shadow of the Day of Judgement.[3]

Bede's interest in the end of the world has long been noted, but only in recent years have we seen the first dedicated studies of Bede's eschatology. These studies have explored Bede's understanding of apocalyptic time and placed his thought in its Insular and wider medieval context.[4] The present chapter will not retread this work but instead aims to complement it by placing Bede's eschatological understanding in the context of his cosmological model and showing its connections to—and prominence in—his wider cosmology. Bede's discussion of the cosmological aspects of the eschaton is scattered throughout a number of different works. He tackled the Apocalypse early on, in his commentary on the Book of Revelation, the *Expositio Apocalypseos*, dated to *c.*701.[5] In it we find the beginnings of his abiding

interest in eschatology, but there is little detail in *Expositio Apocalypseos* on the subject of the cosmos. Instead, the main focus of this chapter will be on *De temporum ratione*, Bede's monumental work on time-reckoning composed in 725. In that work Bede returned to the subject of the end of the world and the end-time cycle as part of his extended treatment of the chronology of the universe and the Six Ages of the world.[6] There he provided much more information on the physical changes that would be brought about by the eschaton. He also composed a number of other works that touch on the subject. He composed a poem on doomsday, *De die iudicii*, the dating of which is contentious.[7] As Michael Lapidge has remarked, *De die iudicii* was written with an 'expansive verbosity' that is uncharacteristic of Bede,[8] and it thus affords us an insight into the details of Judgement Day that are understated in his other writings. There is also powerful imagery of the destruction of the physical cosmos to be found in Bede's commentary on 2 Peter, another work whose date of composition is uncertain (between 709 and 731).[9] In a short work, *De eo quod ait Isaias* (*c*.716), Bede dealt with some questions regarding the cosmic disorder that would accompany the eschaton. Finally, there are comments about the end of the world in Bede's homilies and in his commentaries on the Gospels of Luke and Mark. Taken together, these sources are revealing of the extent to which Bede envisioned the end of the world in physical terms and of the way in which he was able to use his concordance-focussed approach to formulate elegant clarifications to irregularities in the inherited apocalyptic tradition.

Christian apocalypticism before Bede

The apocalyptic perspective of Christianity ultimately derived from a strain in pre-Christian Judaism, present since the third century BCE, that looked forward to a promised future restoration.[10] Where classical philosophies had posited an endless universe or an eternally recurring one, Christian time was rooted in the idea of a beginning and an ending which gave form and meaning to the cosmos and to human existence. A number of Old Testament texts, most prominently the Book of Isaiah, spoke in veiled language of a time of cosmic renewal. Many central texts of the New Testament, meanwhile, from the synoptic Gospels to Paul's letters, indicated a coming return of Christ in majesty and the end of time. This New Testament apocalypticism culminated in the Book of Revelation, which detailed a vision of the future experienced by a John of Patmos, identified by Bede's time with John the Apostle. In the patristic era, exegetes expanded upon the cryptic references of Scripture. Though at first distrusted, the Book of Revelation was eventually absorbed into the mainstream of Christian belief and commentaries were provided by Victorinus of Pettau, Tyconius, Primasius of Hadramentum, Augustine and Jerome.[11] Excursuses on the Apocalypse also featured in works such as Augustine's *De ciuitate Dei* and Gregory the Great's *Moralia in Iob*.

For much of the centuries before Bede, Christian speculation about the physical characteristics of the eschaton were wrapped up in the debates about bodily resurrection. In part, this controversy arose from the amalgamation of two philosophical traditions: where Platonic thought expected a purely spiritual heavenly kingdom—souls returning to the empyrean realms having been freed from the shackles of degraded and the earthly—the biblical tradition was clear in its expectation of a straightforward renewal here on the earthly plane, without the dualistic assumptions of a split between body and soul. The clash of these two differing models resulted in some awkwardly sitting compromises in early Christian eschatological writings.[12] Some early authorities such as Irenaeus of Lyon and Justin Martyr—'millenarian' or 'chiliast' thinkers—believed in a corporeal, thousand-year reign of Christ on earth during which time Edenic conditions would prevail on earth.[13] Such 'carnal' expectations came to be shunned, however, with Augustine (himself once a millenarian) arguing vociferously against this idea.[14] Of the two resurrections promised in Revelation, he said, the first referred metaphorically to the spiritual resurrection experienced by all in the current era who were baptized, not to a coming earthly eschatological kingdom. Thus, the idea of a literal return to earthly prelapsarian conditions was expunged from catholic Christianity. The literality of the second resurrection, however—the resurrection of the body—was preserved. Though Augustine's early view of the future heaven was of 'a world of immaterial, fleshless souls finding rest and pleasure in God',[15] he eventually moved towards an acceptance of the resurrection of the body. This necessitated a renegotiation with the Platonic model of the cosmos. While the Platonic worldview was open to the idea of spirits ascending to heaven, the resurrection of the body did not fit in quite so seamlessly. In *De ciuitate Dei*, Augustine railed against contemporary Platonist philosophers who contended that an earthly body could not exist in heaven and insisted that the resurrected bodies of the saints would be able to exist in the world to come despite their corporeality: 'whereas now the nature of earthly bodies prevails to press souls downwards, at some time will souls not be able to raise earthly bodies on high?'[16] Such was Augustine's newfound commitment to the idea of a resurrection in the flesh that he detailed the new bodies' physical characteristics: bodily imperfections would be removed; everyone would appear in the flower of youth and would be proportional and beautiful; any sexual or erotic aspects would be entirely absent; he even thought that the new bodies would be able to eat and drink, although they would not need to.[17] The eternal kingdom of heaven would be something else, then: not quite the incorporeal Platonic ideal—as the physical bodies of the elect would be reborn there—but certainly not a return to a terrestrial paradise imagined in gross carnal terms. Instead, it was held that the human body would be reborn into something new. This was also true of the cosmos, though there was less information about what this would entail; in contrast to his effusiveness on the subject of future bodies, Augustine had very little to say about the wider world after the Day of Judgement.

The timing of the end also saw different interpretations. The early Church had looked forward with anticipation to the speedy return of Christ and the creation of a new cosmic order. The passing of time, and the failure of such a reality to materialize, necessitated a rethink. Augustine was also central to this realignment of Christian eschatological theology. The Augustinian type of apocalypticism was not apocalyptic in the millenarian sense. Instead, the historical imminence of judgement was subsumed into a wider understanding of 'psychological imminence'.[18] Although apocalypticism is inherently concerned with an approaching cosmic endpoint, that endpoint need not be either definite or fixed in order for apocalypticism to exert an influence. And, although there were many schools of thought that expected imminent judgement, Augustine and those who followed him emphasized the fact that the timing of Judgement Day was indeterminable and that the end could come at any time. This change of approach to the eschaton should not be viewed as lessening the power of Judgement Day in the Christian mentality. As James Palmer has argued:

> denying the imminence of the end of the world still left people with much to be anxious and excited about … psychological imminence and personal eschatology ensured that there were persistent imperatives to act, even where simple predictive apocalypticism was weak.[19]

It is this psychological imminence that we find in Bede's thought. Bede lived in the expectation of Judgement Day, but his theology was not predicated on its immediate occurrence. For this reason—although his eschatology was central to his worldview and to his moral and exhortative writing—Bede was apparently not as concerned as we might expect with the literal events that would accompany the end of the world. At first glance, it appears there is little to say about Bede's understanding of how the eschaton will affect the cosmos: Bede's main text on the subject of the Apocalypse, the *Expositio Apocalypseos* was mostly concerned with allegorical and moral readings of Revelation. However, Bede continued to return to the subject of the end of the world throughout his career (in *De die iudicii*, *De eo quod ait Isaias*, *De temporum ratione*, his commentaries on Mark and Luke and in his homilies). In fact, he went on to spend more time considering the cosmological ramifications of the eschaton than almost any of his predecessors.

Destruction

Bede had a developed understanding of the end-time sequence, the progression of events that was to happen before the end of the world.[20] In *De temporum ratione*, he listed these events: the return of Enoch and Elijah to preach for three years; the conversion of the Jews; the persecution of the Antichrist; a further period of testing immediately prior to the Day of Judgement; and, finally, the return of Christ to judge the whole of humanity.[21] As

Peter Darby has noted, this sequence owes much to Augustine; where Augustine had framed the sequence as conjectural, however, Bede presented these events as certainties.[22] Some of these end-time occurrences involved uncanny natural phenomena and changes to the physical structure of the universe—indeed, Christian tradition had a long history of viewing the eschaton in physical, cosmic terms. What is unique to Bede's vision of the physical consequences of the Last Judgement is the extent to which they were read according to a developed and internally consistent cosmology; it was not enough to accept that these events will happen—Bede aimed to make sense of them, if at all possible, according to his understanding of the created world and its physics.

Many central texts of Christian apocalypticism had forecast cosmic collapse—a breakdown of the fundamental components of the physical world. Particularly influential among Old Testament texts was the Book of Isaiah. Though much of the prophetic material in Isaiah referred to the laying-low of contemporary earthly empires and cities (later to be interpreted allegorically by Christian readers), it also featured strong imagery of cosmic disintegration. The destruction of the earth was often referenced in poetic and obscure terms (as in Isaiah 51:6 for instance), but at other times there were striking descriptions of the world laid waste. Celestial phenomena and the shaking of the earth were two of the main occurrences that would accompany the eschaton according to Isaiah (13:10, 13; 24:18–9; 29:6; 34:3–4). The 'mini-Apocalypses' of Matthew, Mark and Luke all spoke of Old Testament-inspired physical happenings which presaged the end: earthquakes (Mark 13:8; Matt 24:7; Luke 21:11); the darkening of the sun and moon (Mark 13:24; Matt 24:29); the stars falling (Mark 13:25; Matt 24:29); Ocean in chaos (Luke 21:25). The author of the Book of Revelation seems to have conceived of a complete destruction and a new creation, rather than a renewal of the existing universe,[23] and this destruction was accompanied by cataclysmic occurrences drawn from the imagery of Isaiah and other Jewish apocalyptic texts. Although the language of Revelation was cryptic, some details of the literal events of the end times could be gleaned, such as earthquakes (Rev 8:5); a rain of fire and blood (Rev 8:7); and the darkening or destruction of the sun, moon and stars (Rev 8:12). The pseudepigraphical second epistle of Peter contained further details about the Day of Judgement. Much of Bede's information about the literal events of the end of world would be drawn from it. It claimed that 'the heavens shall pass away with great violence, and the elements shall be melted with heat, and the earth and the works which are in it, shall be burnt up' (2 Pet 3:10) and that 'the heavens shall be dissolved and the very elements melted by the heat' (2 Pet 3:12). Although allegorical readings were the focus of the apocalyptic commentaries of Tyconius, Primasius, Augustine and Gregory, the literality of these end-time events was not usually questioned. None of those authors, however—with the important exception of Augustine in *De ciuitate Dei*—spent much time on the question of *how* these phenomena might occur.

It was left to Bede to flesh out the details. He would have a difficult task. For one thing, there was no clearly defined timeline of the end times. Where some scriptural texts presented apocalyptic phenomena in no clear order, others—notably the Gospels of Matthew, Mark and Luke—offered two clearly differentiated groupings: the events leading up to the return of Christ (Matt 24:1–28; Mark 13:1–23; Luke 21:8–26) and those connected with Christ's return (Matt 24:29–31; Mark 13:24–7; Luke 21:27). Unfortunately, these texts also contradicted each other and would require some skilful unpicking in order to make them align with one another.

The idea that massive earthquakes would accompany the eschaton had been expressed many times in Scripture (Mark 13:8; Matt 24:7; Luke 21:11; Rev 8:5). Bede read these passages in light of other biblical texts which suggested that the mountains of the earth would be 'moved out of their places' (Rev 6:14), 'crushed' (Hab 3:6) or 'melted' (Mic 1:4), or that the mountains, hills, islands and the foundations of the earth itself would be shaken (Nah 1:5; Sir 16:19). This is the medley of references that lies behind, for instance, Bede's lines in *De die iudicii*:

> *Praecurrunt illum uel qualia signa: repente*
> *terra tremet montesque ruent collesque liquescent,*
> *et mare terribili confundet murmure mentes.*
>
> Such signs indeed will precede Him: suddenly
> the earth will shake and the mountains will fall and the hills will melt away;
> and the sea will dismay minds with its frightful rumbling.[24]

Bede followed an established trend in believing that the end-time sequence would involve a series of earthquakes 'in various places', followed by a final 'disturbance of the earth' (*terrae motus*) that would be felt throughout the world.[25] In other words, he made a distinction between the (relatively) minor earthquakes that would take place during the years preceding Christ's return (the 'earthquakes in places' of Matt 24:7) and the more extensive 'shaking' of the 'foundations of the earth' promised in Isaiah 24:18–20.[26] In his *De eo quod ait Isaias* (dated to *c.*716) Bede puzzled over the meaning of the latter passage. He suggested that the 'earth' that was to be shaken was in fact a possible reference to the *element* of earth: 'this passage can be taken as a reference to the element of earth itself, which by the end times will have been thoroughly disturbed from its former state'.[27] Rather than a simple earthquake or series of earthquakes, then, Bede read the 'shaking' (*agitatio*) of the eschaton as nothing less than the coming apart of one of the main building blocks of the physical universe, linking it with the disintegration of the other elements that will take place at the very end (cf. 2 Pet 3:10, 12 and below). The usual modern translation of *terrae motus*—'earthquake'—does not quite convey the cosmic implications of this apocalyptic convulsion.

Bede also wrote in *De die iudicii* that during this period of earthquakes the sea 'will confound minds' (*confundet mentes*) with a 'frightful rumbling' (*terribile murmur*).[28] The image of a roiling sea was an integral part of scriptural apocalyptic imagery, and Luke had spoken of how the nations would be distressed by the 'roaring of the sea' (*sonitus maris*: Luke 21:25). The language used by Bede, however, suggests that he was thinking of this Lukan image through the lens of a different source: his favourite authority on natural history, Pliny. According to the Plinian conception of an earth veined with tunnels and caverns, earthquakes were caused by the blasts and paroxysms of wind trapped in those subterranean veins.[29] Given that the waters of the world also flowed through these veins, earthquakes unsurprisingly also had an effect on the Ocean, causing sudden waves at sea and provoking seawater to inundate the land.[30] Finally, earthquakes, according to Pliny, were preceded or accompanied by a 'terrible sound' (*terribilis sonus*), resembling a 'rumbling' (*murmur*).[31] It makes sense, therefore, that Bede would link the shaking and crumbling of the earth promised in many apocalyptic texts with the noise of the sea foretold in Luke—he knew from reading Pliny that such events go together naturally.[32]

Another common feature of scriptural apocalyptic texts was the degeneration of the sun, the moon and the planets. Bede's interpretation of this imagery underwent an evolution over the course of his lifetime. In *De die iudicii*, he referred in a straightforward manner to such celestial phenomena, in language derived from Scripture. Christ's return, said Bede, would be preceded by signs:

> *tristius et caelum tenebris obducitur atris,*
> *astra cadunt rutilo et titan tenebrescit in ortu,*
> *pallida nocturnam nec praestat luna lucernam.*
>
> The sky will be covered with dark obscurity, causing fear,
> the stars will fall from the red [sky] and Titan [the sun] will grow dark in the east,
> the pale moon will not supply a nocturnal lamp.[33]

In his later works, however, he went into more detail about what these phenomena in the heavens might actually entail. He understood from a comparison of the Gospel of Luke with those of Matthew and Mark that there would in fact be *two* different occasions in which the sun, moon and stars would be affected: during the signs preceding the Lord's coming (Luke 21:25) *and* as Christ arrives from on high (Matt 24:29; Mark 13:24–5). On both occasions, the celestial bodies will not actually be destroyed or lessened at all. Rather, the sun, moon and stars will appear to have vanished or been diminished, in the first place because they will have been covered by a 'dark obscurity' and in the second because they will have been overpowered by a new source of light: Christ himself returned in majesty. Just as the stars seem to disappear during the day when their light is submerged in the light

of the sun, so too will the light of all celestial bodies fade to nothingness in comparison with the effulgence of the Lord:

> *sidera obscurabuntur non suo lumine uacuata, sed maioris ui luminis ad aduentum superni iudicis, ne uideantur obtecta, quod in hac uita lunam stellasque omnes a potiore lumine solis interdiu pati cunctis in promtu est. Cum autem peracto iudicio fuerit caelum nouum et terra noua, id est non alia pro aliis, sed haec ipsa per ignem innouata et quasi quadam resurrectionis uirtute glorificata claruerint, tunc, ut isaias praedixit: erit lux lunae sicut lux solis et lux solis septempliciter sicut lux septem dierum.*
>
> the heavenly bodies will be darkened, not by being drained of their light, but by the force of a greater light at the coming of the Supreme Judge, on the supposition that they [merely] appear to be concealed, which sometimes happens to the Moon and all the stars because of the greater power of the Sun. But when there will be a new heaven and a new Earth after the Judgement—which is not one [heaven and Earth] replacing another, but these very same ones [which] will shine forth, having been renewed by fire and glorified by the power of the Resurrection—then, as Isaiah predicts: "The light of the Moon will be as the light of the Sun, and the light of the Sun will be sevenfold, as the light of seven days" (Is 30:26).[34]

Bede's logic here was based on his reading of Isaiah 30:26 and other biblical texts that appeared to imply a rebirth and resurgence of some aspects of the present cosmos, rather than their replacement with something entirely new. As we shall see in the next section, this idea was central in shaping Bede's understanding of what the universe would be like after the Last Judgement.

The final step in the destruction of the world would come about through fire. This notion was built on biblical references which promised a final conflagration (2 Pet 3:7; 3:10), but the idea had developed far beyond the scant details provided in Scripture.[35] For one thing, some thinkers had linked this destructive fire with the idea that souls would be cleansed of minor sins by a 'purgative fire before judgement' (*ante iudicium purgatorius ignis*),[36] though, as we have seen, the link between a post-mortem purgation and one at the Last Judgement had never been clearly defined. Bede, who had untangled this Gordian knot by suggesting that, in fact, there were *two* purgative fires,[37] was in a position to speak with rather more certainty about this final cleansing conflagration. When Christ returns to judge humankind, said Bede, the element of fire will be unleashed on the world:

> *Insuper impletur flammis ultricibus aer,*
> *Ignis ubique suis ruptis regnabit habenis;*
> *Et quo nunc aer gremium diffundit inane,*
> *Ignea tunc sonitus perfundet flamma feroces,*
> *Festinans scelerum saeuas ulciscere causas.*

> Above us the *aer* will be filled with vengeful flames,
> Fire, its reins broken, will rule everywhere,
> And where the *aer* now spreads its empty bosom,
> The fiery flame will spread its bellicose clamour,
> Hastening to punish the cruel responsibilities of sins.[38]

The idea that this fiery destruction would fill the *aer* and only the *aer* was the result of a long tradition of elaboration on the words of Scripture. The fire of the final days had long been associated with Noah's Flood—this link had first been made in Scripture, in 2 Peter 3:6–7, where it was stated that

> the world that was then, being overflowed with water, perished; but the heavens and the earth which are now, by the same word are kept in store, reserved unto fire against the day of judgment and the destruction of wicked people.

The parallel between Flood and final fire was a repeated motif of much Christian exegesis.[39] As we have seen, Bede understood that the waters of the Flood reached the boundary between the *aer* and the *aether* but no higher.[40] This meant, according to a logical inference first outlined by Augustine, that the fire of judgement would also end at this boundary.[41] The idea was a favourite of Bede's (as we have seen, he had used it to deduce the height of the earthly paradise).[42] It recurred throughout his writings,[43] but the argument was perhaps most developed in Chapter 70 of *De temporum ratione*, where he explained his reasoning with conviction:

> *Adueniet autem dies domini sicut fur, quia (sicut ipse testatur, nescimus quando ueniat, sero an media nocte an galli cantu an mane) in quo caeli, inquit, magno impetu transient, elementa uero a calore soluentur. Qui autem sint caeli qui transient, paulo superius docet idem apostolus petrus dicens: caeli erant prius et terra de aqua et per aquam consistens uerbo dei, per quae ille tunc mundus periit. Caeli autem qui nunc sunt et terra eodem uerbo repositi sunt igni reseruati in die iudicii. Non ergo firmamentum caeli, in quo sidera fixa circumeunt, non caelum aetherium, hoc est inane illud maximum a caelo sidereo usque ad aera turbulentum, in quo puro et quieto diurnaeque lucis semper pleno errantia septem sidera uaga ferri creduntur. Sed caelum hoc aerium, id est terrae proximum, a quo aues caeli, quod in eo uolent, appellantur, quod aqua quondam diluuii deletis terrestribus transcendendo perdidit, hoc ignis extremi iudicii eiusdem mensurae spatio procrescens occupando disperdet. Nec sola haec beati petri sententia, qua illos dicit caelos igni iudicii perdendos, qui aqua diluuii perierant, testatur sidereum caelum igni illo quamuis maximo non esse tangendum, sed etiam domini sermo, qui dicit: statim autem post tribulationem dierum illorum, sol obscurabitur et luna non dabit lumen suum, et stellae cadent de caelo. Neque enim sol obscurari, luna suo lumine*

priuari, stellae poterunt cadere de caelo, si caelum ipsum, locus uidelicet eorum, igni uoratum transibit. Nunc autem caelum quidem aereum igni marcescet, sidereum manebit inlesum.

For the day of the Lord shall come as a thief because, as he himself declares, "we know not when he will come, whether in the evening, or in the middle of the night, or at cock-crow, or in the morning" (Mark 13:35). Then the heavens, [St Peter] says, "shall pass away with great violence, and the elements shall melt with fervent heat" (2 Pet 3:10). What these heavens are which shall pass away, the same Apostle Peter teaches a little earlier on, saying: "By the word of God the heavens were of old, the Earth standing out of the water and in the water, whereby the world that then was perished. But the heavens and Earth which are now, by the same word are kept in store, reserved unto fire in the Day of Judgement" (2 Pet 3:5–7). Not, therefore, the firmament of heaven in which the fixed stars revolve, nor the *aetherial* heaven (that is, that great empty space between the starry heaven and the turbulent *aer*, full of pure and tranquil diurnal light, in which it is believed that the seven wandering stars roam) but this heaven of the *aer* that is next to the Earth (from which the "birds of heaven" that fly therein are named),[44] which the waters of the Flood once destroyed when they overflowed the annihilated Earth—this [heaven] the fire of the Last Judgement will destroy, growing in size until in occupies its entire expanse. Not only does the statement of St Peter in which he says that those heavens which the Flood waters destroyed are to be destroyed by the fire of Judgement, testify that the starry heaven will not be touched by this fire, no matter how great it will be, but so also does the word of the Lord which says: "Immediately after the tribulation of those days the Sun will be darkened, and the Moon will not give its light, and the stars will fall from heaven" (Matt 24:29). For the Sun could not be darkened, nor the Moon deprived of light, nor could the stars fall from heaven, if the heaven itself (that is, their place) were to perish, consumed by fire. So at that time the heaven of the *aer* will shrivel up in fire, [but the heaven] of the stars will remain undamaged.[45]

Thanks to this conflagration, 'the elements shall melt with the burning heat' (2 Pet 3:12). It seems likely that the author of 2 Peter may not have meant to refer to the four elements.[46] But in the Latin translation available in the west and in the tradition of commentary upon it, the reference to *elementa* was to be taken quite literally, lending 2 Peter's pronouncement an aura of cataclysmic and profound cosmic collapse.[47] As Bede explained in his commentary on 2 Peter: 'there are four elements of which this world is composed—fire, air, water and earth—all of which that mighty fire will consume'.[48] As we shall see, however, Bede was optimistic about the fate of the elements—or at least some of them—in the world to come.

This destructive fire had a further role to play. Not only would it destroy the physical world, it would serve in some way as a punishment for sinners—according to 2 Peter 3:7, it was reserved for the 'destruction of wicked people'. Augustine had therefore assumed that this fire would serve to literally kill the wicked.[49] Bede was not sure what the role of this fire might be—was it purgative or punitive?[50] Certainly some people would be affected by it, 'but whether those who burn there are not to be corrected but are rather to be damned to eternal fire, who can venture to decide beforehand?'[51] He was certain, however, that the fire would not affect the elect:

> *satis autem clarum est, quia raptis ad uocem tubae obuiam domino in aera perfectis seruis illius conflagratio mundana non noceat, si trium puerorum mortalia adhuc corpora circumpositus camini ignis tangere nequiuit.*
>
> but it is sufficiently clear that, having been caught up at the sound of the trumpet to meet the Lord in the *aer*, his perfect servants will not be harmed by the conflagration of the world, seeing as how the fire of the furnace was not even able to touch the mortal bodies of the three youths whom it surrounded (Dan 3:23–4).[52]

In Bede's reading of this vengeful fire, then, the flames would not harm the elect any more than they had harmed the three men who had walked unharmed among the flames in the Book of Daniel.[53] The flames would punish the wicked but pass over the good without harming them. Perhaps Bede was thinking of this same phenomenon when he wrote, in *De die iudicii*:

> *Nec uindex ardor cuiquam tunc parcere curat,*
> *sordibus ablutus ueniat nisi ab omnibus illuc.*
>
> Then the punishing fire will not care to spare anyone
> Unless they come thither cleansed of all stains [of sin].[54]

Bede seems to have derived this idea—of a fire that will consume the sinner but leave the good person unscathed—from the late-seventh-century *uita* of the Irish saint, Fursa, which was well known to him.[55] In that work it was related how Fursa, while on an extracorporeal soul-voyage, was shown four fires; he was assured by one of his angelic guides that the flames would not harm him—they were permitted only to punish the deserving.[56] Yet it seems clear that the author of the *Visio s. Fursei* did not intend for these fires to be identified with the fire of the Last Judgement—they operate in the present.[57] When Bede came to write his own account of Fursa's life in the *Historia ecclesiastica*, he paid particular attention to these fires and, in fact, significantly changed the thrust of the original story.[58] In his version, the fires that Fursa met were clearly supposed to be the future apocalyptic flames of 2 Peter 3. As Bede put it: '[Fursa] was told that they were the fires which were to set the world on fire and to consume it' (*audiuit hos esse ignes qui mundum*

succendentes essent consumturi).[59] Bede then quoted the angel's description of the fire's power to burn directly from the *Vita s. Fursei* (although he did edit for clarity):

> *cumque adpropinquassent, pertimescens ille dicit angelo: "Domine, ecce ignis mihi adpropinquat". At ille, "Quod non incendisti, inquit, non ardebit in te; nam etsi terribilis iste ac grandis esse rogus uidetur, tamen iuxta merita operum singulos examinat, quia uniuscuiusque cupiditas in hoc igni ardebit. Sicut enim quis ardet in corpore per illicitam uoluptatem, ita solutus corpore ardebit per debitam poenam".*
>
> As it approached him, [Fursa] cried out in fear to the angel: "Look, sir, the fire is coming near me". But the angel answered, "That which you did not kindle will not burn you; for although the conflagration seems great and terrible, it tests each man according to his deserts, and the evil desires of everyone will be burned away in this fire. For just as in the body a man burns with illicit pleasures, so when he is free from the body, he makes due atonement by burning".[60]

By projecting the anonymous *uita*'s spiritually discriminating fire onto the conflagration at the Apocalypse, Bede had added a novel wrinkle to the end-time sequence. Where thinkers like Augustine had supposed that the elect would have to be lifted above the final conflagration, to the *aether*, so as to survive it,[61] Bede's version of the Last Judgement introduced an elegant means by which the elect might survive the fire, just as Noah and his family had survived the Flood.

From his comments in *De temporum ratione*, Bede seems to have believed that this fiery onslaught would occur at the moment that Christ returned, possibly as a corollary of the blazing light that would also accompany his coming. Even the moment of judgement itself—perhaps the most metaphysical element of the apocalyptic sequence to modern eyes—had a clear logic to it in Bede's vision. The Gospel of Matthew had promised that, when Christ returned in glory, he would 'set the sheep on his right hand, but the goats on his left' (Matt 25:33) and that he 'shall say to them also that shall be on his left hand: Depart from me, you cursed, into everlasting fire which was prepared for the devil and his angels' (Matt 25:41). This was understood by exegetes as a straightforward reference to the division of the elect from the damned on the Day of Judgement, the right hand representing the blessedness of eternal life, the left hand the punishments of the wicked—a ubiquitous interpretation followed by Augustine, Jerome, Gregory and many others whose works were known to Bede.[62] Bede mentioned the idea multiple times in his writings—it was a fixed and recurring feature of his eschatological vision[63]—and it is clear that he did not treat it as simply an allegory but that he expected the elect and the damned to be arranged, quite literally, to Christ's right and left, respectively. This specificity is brought out in Bede's discussion of the moment of judgement in *De temporum ratione*. There

he wrote that, as the Lord arrives, in 'the twinkling of an eye' (1 Cor 15:52) the dead will be resurrected and all of humanity will be brought to face him. The saints, as per 1 Thessalonians 4:16, 'will be immediately caught up to meet him in the *aer*' (*sancti confestim rapiantur obuiam illi in aera*),[64] but Bede was not sure whether this would also apply to the reprobate. Perhaps they too would be lifted up to meet their Judge, or perhaps 'the deserts of the sinners will weigh so heavily that even though they have immortal bodies they will be incapable of rising on high' (*meritis peccatorum ita praegrauentur ut quamuis inmortalia corpora habentes ad altiora nequeant eleuari*).[65] Certainly, the elect would take their place 'on high at his right hand' (*in sublimi a dextris eius*); if the damned are unable to rise they will be positioned 'lower down on his left' (*in inferioribus a sinistris*).[66] And in fact, this position would be quite appropriate, as the damned would then await their sentence 'standing on earth and surrounded by fire' (*in terra positi igni circumdati*).[67] As I showed in Chapter 7, there is good reason to think that Bede even envisioned the precise direction in which Christ would face as he passed judgement—he would stand facing the east, so that the sinners would be at his left, to the north-east, and the elect at his right, to the south-east.[68]

Renewal

Once the world had been consumed by fire and humankind judged, what would follow? Bede's comments on the post-judgement cosmos were necessarily briefer than his discussions of the world's destruction. The language of biblical apocalyptic, apart from being highly symbolic and allusive, was generally more concerned with the events of the eschaton rather than what came after. There were some hints: generally speaking, biblical visions of the world to come were defined mainly by contrast with the present world—heaven's absence of temporal hardships are what make it heaven. 'Death shall be no more', according to Revelation, 'nor mourning, nor crying, nor sorrow shall be any more, for the former things are passed away' (Rev 21:4). There will be no night in the kingdom of God (Rev 21:25, 22:5). In fact, it is implied that the sun will no longer be present, as it will not be needed in this new realm lit by divine light (Rev 7:16; 22:5). Nor will the sea exist there (Rev 21:1). From these clues, it was possible to piece together a general picture of conditions in the promised eternal homeland.

After the world has ended, the elect in heaven will enjoy complete freedom from the negative aspects of life in the temporal world. Yet in this fact lay the problem for those who sought to describe heaven. With physicalist, 'chiliast' visions of paradise relegated to the dustbin of heresy, the medieval writer faced some difficulties in trying to evoke the reality of the future paradise in concrete terms. The post-apocalyptic paradise, like the Garden of Eden, is defined by its absences, and Bede found it difficult to depict the joys of heaven without resorting to descriptions of what was *not* to be found there. After Judgement Day, Bede wrote, 'sorrow, grief and mortality

shall remain only in hell'.[69] 'No house', he said, 'will be needed in the glory of heavenly life, where, with the light of divine contemplation making all things peaceful, no breeze of adversity will remain to be feared'.[70] At one point in *De die iudicii* Bede resorted to simply listing those things that would be absent in the future: there will be no thirst, hunger, sleep, labour, fevers, diseases, injuries, frosts, flames, weariness, sadness, anxieties, torments, catastrophes, bolts of lightning, storm clouds, winter, thunder, snow, hail, tempests, anguish, poverty, sorrow, death, accidents or need.[71] When he came to describe what actually *is* in heaven, Bede stuck mainly to abstractions: 'there reign peace and love, goodness, wealth, joy, happiness, virtue, light, eternal life, glory, praise, tranquility, honour and sweet concord'.[72] Hell was of course easier to describe—the picture painted by Bede of the sinner's deserts after Judgement Day is the epitome of bodily suffering. He described 'the regions of eternal hell filled with black fires, wintry ice mingling together with burning flames',[73] where 'the stench of overwhelming decay fills your nostrils' (*fetor praeingenti complet putredine nares*), and 'worms tear at your bones' (*uermes lacerant ossa*).[74] In comparison with his depiction of paradise, there is an appreciable physicality to Bede's image of hell.

But if concrete details about the 'new heaven and new earth' remained scant, one aspect was beyond doubt—that they would represent a renewal and rebirth of the present cosmos. In his commentary on Revelation, Bede wrote:

> *Peracto quippe iudicio esse desinunt caelum et terra, cum incipit esse caelum nouum et terra noua, mutatione scilicet rerum non omnimodo interiturarum. Praeterit enim figura huius mundi, non dixit "et substantia". Eadem namque in melius commutanda esse creditur.*
>
> When the judgement is over, heaven and earth shall cease to be, and "a new heaven and earth" (Rev 21:1) will come into existence through the transformation of things and not by their complete destruction. "For the form of this world passes away"; he does not say "and the substance". For [heaven and earth], it is believed, are to be changed into something better.[75]

He returned to the theme in *De temporum ratione*, noting that after the Last Judgement,

> *fuerit caelum nouum et terra noua, id est non alia pro aliis, sed haec ipsa per ignem innouata et quasi quadam resurrectionis uirtute glorificata claruerint.*
>
> there will be a new heaven and a new earth—that is to say, [there will] not [be] different ones in place of the originals, but these very ones, having been renewed by fire, will grow radiant as though through a certain glorified power of resurrection.[76]

He drew much of this from Augustine and Primasius (who was himself following the lead of the Bishop of Hippo). Indeed, the idea that the *mundus*, 'having been altered for the better' (*in melius innouatus*),[77] would continue rather than be replaced was a relatively uncontroversial belief.[78]

But Augustine's argument for cosmic renewal had a rather different emphasis to Bede's. Though the Bishop of Hippo alluded to a number of possible outcomes, he seems to have favoured the idea that the sublunary part of the universe was to be destroyed, 'purifying' the cosmos in the sense of *removing* the corporeal and degraded part of it.[79] Augustine's vision was of a movement beyond the shackles of the elemental world. His definition of 'body' was tied to the Platonic definition—something lacking length and breadth—and he envisioned the future world in Platonic terms.[80] For Bede, on the other hand, to say something was 'bodily' was to say that it was composed of one or more of the four elements. His reading of the physical world after judgement was therefore inescapably tied to elemental theory. One gets the impression that Augustine envisioned the purified bodies of the elect floating around in a kind of Aristotelian aether. Bede, though he followed Augustine in asserting that the destructive fire would only touch the world below the moon, seems to have leaned more towards the idea that this lower part of the universe would in fact be cleansed and reborn through the same fire. In fact, the elements themselves would be renovated according to Bede and would play a role in this new *mundus*—or at least two of them would, as he explained in his commentary on 2 Peter:

> *Elementa uero calore soluentur. Quattuor sunt elementa quibus mundus iste consistit, ignis, aer, aqua, et terra, quae cuncta ignis ille maximus absumet. Nec tamen cuncta in tantum consumet ut funditus non sint sed duo in totum consumet, duo uero in meliorem restituet faciem. Vnde in sequentibus dicitur: Nouos uero caelos et nouam terram et promissa ipsius expectamus. Non enim dixit alios caelos et aliam terram sed ueteres et antiquos in melius commutandos … Quae ergo peribunt ueterescent et mutabuntur constat pro certo quia consumpta per ignem mox abeunte igne gratiorem resumunt speciem. Praeterit enim figura huius mundi, non substantia, sicut et carnis nostrae non substantia perit sed figura immutabitur quando quod seminatur corpus animale surgit corpus spiritale. De igne autem et aqua nihil tale legimus, quin potius habemus in apocalipsi: Et mare iam non est; habemus in prophetis: Et lux lucernae non lucebit tibi amplius.*
>
> "The elements shall be melted with heat" (2 Pet 3:10). There are four elements of which this world is composed—fire, air, water and earth—all of which that mighty fire will consume. Yet it will not destroy all of [the elements] so that they will utterly cease to exist; rather, it will destroy two of them completely and will renew two in a better form. For which reason it says in what follows: "But we wait for new heavens and a new

> earth and his promises" (2 Pet 3:13). For he did not say "different heavens" and "a different earth" but the old and ancient ones to be transformed for the better … It is absolutely certain that the things that will perish, grow old and change, after having been consumed by fire, will take on a more pleasing appearance as soon as the fire departs. "For [as Paul says] the shape of this *mundus* passes away" (1 Cor 7:31), not the "substance"—just as the shape (not the substance) of our flesh will be changed at that time when what "is sowed as a physical body rises as a spiritual body" (1 Cor 15:44). Regarding fire and water however we read nothing along these lines but rather we have in Revelation: "And the sea now is no longer" (Rev 21:1); and in the prophets:[81] "And the light of the lamp shall shine no more at all for you" (Rev 18:23).[82]

The question of what would happen to the sea had been considered by Augustine and Primasius, and Bede repeated their observations more or less verbatim in both the *Expositio Apocalypseos* and *De temporum ratione*: 'whether the sea will be dried up by that mighty heat, or whether it will also be transformed into something better, is not evident'.[83] But what Bede presented in his commentary on 2 Peter represents a much more interesting conjectural reading of the post-apocalyptic restoration. By reading Revelation's cryptic references in light of elemental theory, Bede was able to provide more information about the renewed cosmos than any of his predecessors. The disappearance of the sea, according to Bede, is nothing less than the removal of one of the four elements of God's creation; Revelation's reference to a dearth of lamps suggests a similar fate for the element of fire (of course the fire that would be destroyed in the conflagration would be that terrestrial fire that occurs in the world below the moon—the fine *aether* above the moon would not be touched by this destruction and would continue as before). This idea may have suggested itself to Bede because it chimed with the cosmic roles played by the elements of fire and water. He tended to think of these two elements as having been set aside for humanity's punishment—both in worldwide cataclysms (the Flood and the judgement fire) and in post-mortem punishments: the presence of water and fire would still very much felt in the post-judgement hell. Furthermore, the travails of this life were associated by Bede with these same elements: he described how Abbot Sicgfrith, 'having passed through the fire and water of earthly tribulation' (*pertransito igne et aqua tribulationum temporalium*, a paraphrase of Psalm 65:12), was brought to eternal rest.[84] The implied contrast between the presence of these elements in this world and their absence in the next speaks to Bede's concrete visualization of the post-judgement cosmos that belies the often vague insinuations of Christian tradition. Unfortunately, Bede's commentary on 2 Peter is difficult to date, though it was likely composed later than 709 and certainly before 731.[85] It is hard to decide, therefore, what to make of this passage without knowing where it falls chronologically in relation to his other eschatological discussions, such as the one found in *De*

temporum ratione—it may represent his mature thought on the subject of the physical world after the eschaton or it may reflect an abortive line of enquiry that he dropped from future discussions of the subject. Either way, it speaks to the rationalizing way in which Bede approached such questions and to his inclination towards synthesis and explanation. Other thinkers before Bede had speculated about the possible removal of some elements from the reborn cosmos (Origen had thought that earth and water, the most corporeal of the elements, would be absent from the resurrected body),[86] but Bede arrived at his theory through the application of his concordance exegesis approach, cross-referencing biblically derived information with the cosmology he had learned from Pliny and others. Bede's distinctive interpretation would prove influential; it would be taken up by the *Glossa ordinaria* and go on to influence such thinkers as Alexander of Hales.[87]

Finally, questions about the state of the physical world after judgement were closely tied to questions about the resurrected body. On this subject, centuries of debate had shaped an orthodox position, leaving little room for manoeuvre. Bede understood that the new bodies of the elect would be physical, corporeal bodies, though renewed and improved as per Augustine.[88] In fact, he specifically dismissed as heresy the idea that these bodies would be intangible and finer than wind or air.[89] Rather, he contended that,

> *corpus nostrum illa immortalitatis gloria sublimatum subtile quidem sit per effectum spiritalis potentiae, sed palpabile per ueritatem naturae, iuxta exemplum dominici corporis, de quo a mortuis suscitato dicit ipse discipulis: "Palpate et uidete, quia spiritus carnem et ossa non habet, sicut me uidetis habere".*
>
> our [future] body, while it is indeed exalted by the glory of immortality and made subtle by the effectual working of the spirit, is palpable by the reality of its nature as was our Lord's body, concerning which he said to his disciples, when it had been raised from the dead, "Handle me and see, for a spirit has not flesh and bones as you see me have" (Luke 24:39).[90]

The perfected bodies of these future elect would be immune to the degrading effects of temporal existence. Instead they would be immortal, pure and perfect: 'no vestiges of old age will remain when heavenly incorruption shall raise bodies on high'.[91] Nor would they need any 'nightly rest' (*quies noctis*) as they do now.[92] Yet they will be *bodies*—material and tangible. The resurrected bodies 'shall be as the angels of God in heaven' according to Matthew 22:30 and, as we have seen, connected these future bodies with the kinds of bodies assumed in the present by the angels.[93] Indeed, Bede was an adherent to the 'doctrine of replacement'—the idea that the elect were destined to 'fill out' (*implere*) the ranks of the angels, which had been depleted by the defection of Satan and his followers.[94] Unsurprisingly then, Bede conceived of the renewed human bodies as fiery and aetherial like the bodies of the

angels, composed of a finer form of matter that would act to purify humans of lower, corporeal residues. In his commentary on 1 Peter, Bede described how 'all blemish of past corruption' (*omne praeteritae corruptionis naeuum*) would be sloughed off by the 'power' (*uirtus*) of our immortal bodies, 'in the same way as a flame by the power of its heat is accustomed to consume a drop of water that is put in it'.[95] As in the case of the angels, the resurrected body would be able to eat but it will not need to. The resurrected Jesus 'ate from power not from necessity' (*manducauit potestate non necessitate*). The temporal human body eats because of a 'need' (*indigentia*), just as 'the parched ground' (*terra sitiens*) swallows water because of need; Christ's body—and the future human body—eats by virtue of its 'power' (*potentia*), in the same way as 'the burning ray of the sun' (*solis radius candens*) dispels water through its heat.[96] The future body, in other words, will not receive any sustenance from food, but it will be able—like the angels—to eat (cross reference with Bede's angelology also answers the question of what happens to the food after it is eaten: it is consumed or destroyed like a water drop thrown onto a fire, just like the imperfections of the physical body).[97] What else will it mean to have spiritual bodies like the angels? Bede wrote in *De tabernaculo* that 'the angels … are able to hasten everywhere as if with nimble flight; nor do they suffer any delay, but rather appear immediately wherever they wish',[98] and stated that 'this same thing is certainly promised to us also after the resurrection, for we shall then be clothed with spiritual bodies'.[99] Most importantly of all, the spiritual bodies of the elect would be able to contemplate God directly, not indirectly as in the present.[100] Like the angels who keep him in sight even as they travel about the cosmos,[101] post-resurrection human beings will glory continually and eternally in the presence of God.

Conclusion

It might be surprising to find that Bede wrote so much about the literal events of the end of the world—but although he was careful to avoid the kind of imminent apocalypticism that Augustine had warned against, there was no reason for him not to believe that the narrative of the eschaton presented in Scripture was as certain as the narrative of Creation. Why not, then, interpret the end of the world according to the fundamental cosmological axioms of *De natura rerum* as he had the beginning? Perhaps because millenarianism was such a recent vexation, fourth- and fifth-century commentaries on Revelation had tended to shy away from discussion of the physical details of the eschaton, leaving plenty of room for further speculation. Bede's starting point was Augustine's *De ciuitate Dei*, where the Bishop of Hippo had drawn on classical cosmography to make sense of the destruction promised in Scripture. This gave Bede licence to employ to fit the world's end into the cosmological model of *De natura rerum*. Though he paid lip service to the notion that the Apocalypse is inherently unknowable in the present, he

also proceeded on the assumption that it will work according to the kind of logic that he had already apprehended in the world around him. Bede's vision of the end and of the renewal of the cosmos drew on ideas that he had developed over the course of his career, in a variety of different works: the shaking of the earth will happen according to Bede's favoured theory of the Plinian veins, the ambit of the fiery conflagration was defined according to the same logic as that used on the Flood and the height of paradise, the fires of judgement corresponded to the fires of Fursa's vision and the aetherial bodies of the elect were the same as those taken on by angels. As such, it is a fitting subject on which to end.

Notes

1 P.C. Almond, *Heaven and Hell in Enlightenment England* (Cambridge, 1994), 111–30.

2 On late antique and early medieval apocalypticism in general, see J. Palmer, *The Apocalypse in the Early Middle Ages* (Cambridge, 2014); B.E. Daley, *The Hope of the Early Church: A Handbook of Patristic Eschatology* (Cambridge, 1991); B. McGinn, 'Turning Points in Early Christian Apocalypse Exegesis', in R.J. Daly (ed.), *Apocalyptic Thought in Early Christianity* (Grand Rapids, 2009), 81–105; and the essays in R.K. Emmerson and B. McGinn (eds), *The Apocalypse in the Middle Ages* (Ithaca, NY, 1992). On the influence of apocalyptic thought in the English-speaking kingdoms, see H. Foxhall Forbes, *Heaven and Earth in Anglo-Saxon England: Theology and Society in an Age of Faith* (Farnham, 2013), 129–200.

3 Darby, *End of Time*, 207–14; Davidse, 'Sense of History', 664–5.

4 Darby, *End of Time*; Darby and Wallis, *Bede and the Future*; Palmer, *Apocalypse*, 95–105; Darby, 'Apocalypse and Reform in Bede's De die iudicii', in M. Gabriele and J.T. Palmer, Apocalypse and Reform from Late Antiquity to the Middle Ages (Abingdon, 2019); Wallis, *Bede: Commentary on Revelation*, 1–96; G. Bonner, *Saint Bede in the Tradition of Western Apocalyptic Commentary*, Jarrow Lecture (Jarrow, 1966), repr. in M. Lapidge (ed.), *Bede and his World: the Jarrow Lectures, 1979–93*, 2 vols. (1994), I, 153–83.

5 On the dating of the *Expositio Apocalypseos*, see Wallis, *Commentary on Revelation*, 39–51.

6 Bede, *DTR* 67–71 (ed. Jones, CCSL 123B, 535–44).

7 An argument for a late date is set out in Darby, 'Apocalypse and Reform'. For the opposite view, see Lapidge, '*Versus de die iudicii*', 110–11. For the later influence of the poem, see P. Lendinara, 'The *Versus de die iudicii*: Its Circulation and Use as a School Text in Late Anglo-Saxon England', in R.H. Bremmer and K. Dekker (eds), *Foundations of Learning: The Transfer of Encyclopaedic Knowledge in the Early Middle Ages* (Leuven, 2007), 175–212.

8 M. Lapidge, *Bede the Poet*, Jarrow Lecture (Jarrow, 1994), repr. in his *Anglo-Latin Literature*, 600–899 (London, 1996), 313–38, at 320.

9 See Darby, *Bede and the End of Time*, 67–8.

10 See the essays in J.M. Scott (ed.), *Restoration: Old Testament, Jewish, and Christian Perspectives* (Leiden, 2001), and particularly D.E. Aune, 'From the Idealized Past to the Imaginary Future: Eschatological Restoration in Jewish Apocalyptic Literature', 13–38.

11 For a survey of this exegesis on Revelation, see E.A. Matter, 'The Apocalypse in Early Medieval Exegesis', in R.K. Emmerson and B. McGinn (eds), *The*

Apocalypse in the Middle Ages (Ithaca, NY, 1992), 38–50, at 38–45; Palmer, *Apocalypse*.

12 P. Fredriksen, 'Vile Bodies: Paul and Augustine on the Resurrection of the Flesh', in M.S. Burrows and P. Rorem (ed.), *Biblical Hermeneutics in Historical Perspective: Studies in Honor of Karlfried Froehlich on his Sixtieth Birthday* (Grand Rapids, MI, 1991), 75–87.

13 P. Fredriksen, 'Apocalypse and Redemption in Early Christianity: From John of Patmos to Augustine of Hippo', *Vigiliae Christianae* 45 (1991), 151–83, at 152–3.

14 Augustine, *DCD* 20.6–7 (Dombart and Kalb, CCSL 48, 706–12).

15 McDannell and Lang, *Heaven*, 61.

16 Augustine, *DCD* 22.11 (ed. Dombart and Kalb, CCSL 48, 830): 'cum ualeat nunc natura corporum terrenorum deprimere animas deorsum, aliquando et animae leuare sursum terrena corpora non ualebunt?'

17 Augustine, *DCD* 13.22 (ed. Dombart and Kalb, CCSL 48, 405); *Ep.* 102.6 (ed. Goldbacher, CSEL 34.2, 549–50).

18 B. McGinn, 'John's Apocalypse and the Apocalyptic Mentality', in R.K. Emmerson and B. McGinn (eds), *The Apocalypse in the Middle Ages* (Ithaca, NY, 1992), 3–19; B. McGinn, 'The End of the World and the Beginning of Christendom', in M. Bull (ed.), *Apocalypse Theory and the End of the World* (Oxford, 1995), 58–89; Palmer, *Apocalypse*, passim.

19 Palmer, *Apocalypse*, 228.

20 P. Darby. 'Bede's History of the Future', in P. Darby and F. Wallis (eds), *Bede and the Future* (Farnham, 2014), 115–38; P. Darby, *Bede and the End of Time*, 95–143.

21 Bede, *DTR* 67–70 (ed. Jones, CCSL 123B, 535–42).

22 Darby, 'Bede's History of the Future', 121.

23 J. Fekkes III, *Isaiah and Prophetic Traditions in the Book of Revelation: Visionary Antecedents and their Development* (Sheffield, 1994), 229.

24 Bede, *DDI* 50–2 (ed. Fraipont, CCSL 122, 441).

25 Bede, *EA* 1.8 (ed. Gryson, CCSL 121A, 305).

26 'For the flood-gates from on high are opened, and the foundations of the earth shall be shaken. With breaking shall the earth be broken, with crushing shall the earth be crushed, with trembling shall the earth be moved. With shaking shall the earth be shaken as a drunken man'.

27 Bede, *De eo quod ait Isaias* (PL 94 706): 'potest … de ipso terrae elemento dictum accipi, quod tempore novissimo penitus a pristino statu commovendum sit'.

28 Bede, *DDI* 52 (ed. Fraipont, CCSL 122, 441).

29 Pliny, *NH* 2.81 (LCL 330, 322–4).

30 Pliny, *NH* 2.83; 2.86 (LCL 330, 326; 330).

31 Pliny, *NH* 2.82 (LCL 330, 324).

32 Pliny also claimed that the recession of the sea comes about by the same means. I think it possible (though very difficult to confirm) that Bede was linking Luke 21:25 with the disappearance of the sea as promised in Revelation (21:1).

33 Bede, *DDI* 53–6 (ed. Fraipont, CCSL 122, 441).

34 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 540; trans. Wallis, 244).

35 See the useful discussion in M.B. Bedingfield, 'Anglo-Saxons on Fire', *The Journal of Theological Studies* 52 (2001), 658–77.

36 Gregory, *Dialogi* 4.41 (ed. de Vogüé, SC 265, 148).

37 See above, 183.

38 Bede, *DDI* 72–6 (ed. Fraipont, CCSL 122, 442).

39 See Anlezark, *Water and Fire*, 73–84.

40 See above, 77–8.

41 Augustine, *DCD* 20.18 (ed. Dombart and Kalb, CCSL 48, 448); cf. M. Alfeche, 'The Coming of the New Cosmos', *Augustiniana* 46 (1996), 5–44, at 17–19.

42 Chapter 3, 77–8.
43 Bede, *IESC* 3.3.10 (ed. Hurst, CCSL 121, 279); Bede, *IG* 2.8 (ed. Jones, CCSL 118A, 130); Bede, *In Marc*. 4.13.31 (ed. Hurst, CCSL 120, 602); Bede, *In Luc*. 6.21.33 (ed. Hurst, CCSL 120, 371).
44 Wallis, *Bede: The Reckoning of Time*, 244 n22 misreads this line, I believe. Bede was saying that the phrase 'birds of heaven', a scriptural commonplace (Eccl 10: 20; cf. Matt 6:26; Rev 19:17), refers to 'heaven' as in the *aer*, not that the word 'birds' (*aues*) is derived from the word *aer*.
45 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 539–40; trans. Wallis, 243–4, modified).
46 P.W. Van der Horst, '"The Elements will be Dissolved with Fire": The Idea of Cosmic Conflagration in Hellenism, Ancient Judaism, and Early Christianity', in P.W. van der Horst (ed.), *Hellenism — Judaism — Christianity: Essays on their Interactions*, 2nd ed (Leuven, 1998), 271–92. at 288.
47 Bede may have been influenced here by a seventh-century Irish commentary on the Seven Catholic Epistles well known to him which glossed 2 Peter 3:12 as follows: 'the fourth region of the world, fire, invades the [other] three regions (that is, heaven [i.e. the *aer*], earth and sea)'; *Expositio in septem epistolas catholicas Hilario adscripta* (ed. McNally, CCSL 108B, 107): 'Quarta pars mundi, ignis, tres partes inuadit. Id, caelum et terra<m> et mare'.
48 Bede, *In epistulas septem catholicas* 3.3 (ed. Hurst, CCSL 121, 279): 'Quattuor sunt elementa quibus mundus iste consistit, ignis, aer, aqua, et terra, quae cuncta ignis ille maximus absumet'.
49 Augustine, *DCD* 20.18 (ed. Dombart and Kalb, CCSL 48, 448).
50 The idea that the destructive fire of the Day of Judgement *was* the purgative fire of patristic tradition seems to have first been explicitly expressed in *De ordine creaturarum*. Interestingly, however, Bede seems to have been unaware of the relative recency of this idea—he read it back into earlier texts. In *De temporum ratione* he claimed that Augustine 'understands from the statements of the prophets that some of the elect will be purged by this [fire] from certain less serious sins': Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541): 'namque aliquos electorum eo purgari a leuioribus quibusdam admissis … ex prophetarum dictis intellegit'. In fact, Augustine clearly read the 'cleansing fire' as an allegory for earthly tribulation. Bede's innovation was that he separated the fire of purgatory from the fire of Judgement Day—in doing so, he found himself able to make sense of the sometimes vague utterances of Scripture and of the Church Fathers.
51 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541): 'sed an illo urantur qui non per illum castigandi, sed aeterno potius sunt igne damnandi, quis praeiudicare audeat'.
52 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541).
53 Augustine first made the connection with this episode from Daniel in *DCD* 20.18 (ed. Dombart and Kalb, CCSL 48, 730).
54 Bede, *DDI* 77–8 (ed. Fraipont, CCSL 122, 442).
55 See now R. Bassi, 'Visions of the Otherworld: The Accounts of Fursey and Dryhthelm in Bede's *Historia ecclesiastica* and the *Homilies* of Aelfric', in H. Appleton and L. Nelstrop (eds), *Art and Mysticism: Interfaces in the Medieval and Modern Periods* (Abingdon, 2018), 221–45.
56 *Transitus beait Fursei* (ed. and trans. Rackham, 18–19):

> *quod non accendisti non ardebit in te, licet enim terribilis est et grandis est iste ignis. tamen secundum merita operum singulos examinibit. Quia uniuscuiusque cupiditas in isto igne ardebit. Sicut corpus ardet per inlicitam uoluntatem ita … etim ardebit per debitam poenam ….*
>
> Because thou hast not kindled it, it shall not burn thee. This fire is permitted to the terrible and great, and it shall try each one according to the deserving

of his works, Because the avarice of each and every one shall burn in this fire. Like as the body doth burn because of unlawful lust, so shall it burn because of due punishment.

57 Sims-Williams, *Religion and Literature in Western England*, 252–4.
58 Patrick Sims-Williams surmises that ‘a variant or corrupt text of the *Vita S. Fursei* circulated in Anglo-Saxon England’ (254).
59 Bede, *HE* 3.19 (ed. Lapidge, SC 490, 106; trans. Colgrave and Mynors, 273).
60 Bede, *HE* 3.19 (ed. Lapidge, SC 490, 106; trans. Colgrave and Mynors, 273).
61 Augustine, *DCD* 20.18 (ed. Dombart and Kalb, CCSL 48, 448).
62 Augustine, *De fide et symbolo* 7.14 (CSEL 41, 16); Augustine, *In Iohannis euangelium tractatus* 21.13 (ed. Willems, CCSL 36, 220); Jerome, *In Ecclesiasten* 10.2 (ed. Adriaen, CCSL 72, 333–4); Gregory, *Moralia* 11.36 (ed. Adriaen, CCSL 143A, 613–14).
63 Bede, *Hom*. 2.21 (ed. Hurst, CCSL 122, 336–40); Bede, *In Ez*. 1.1610–15 (ed. Hurst, CCSL 119A, 281); Bede, *In prouerbia Salomonis* 3.27.27 (ed. Hurst, CCSL 119B, 136); Bede, *In Marc*. 4.16.5 (ed. Hurst, CCSL 120, 640); Bede, *Epistola ad Ecgbertum* 14 (Plummer, 417).
64 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541; trans. Wallis, 245).
65 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541; trans. Wallis, 245).
66 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541; trans. Wallis, 245).
67 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 541; trans. Wallis, 245).
68 See above, 195–201.
69 Bede, *EA* 3.36 (ed. Gryson, CCSL 121A, 522): ‘dolor luctus et mortalitas tantum in gehenna remaneant’.
70 Bede, *Hom*. 1.24 (ed. Hurst, CCSL 122, 175; trans. Martin and Hurst, 240): ‘In illa namque caelestis uitae gloria domus necessaria non erit ubi diuinae contemplationis luce omnia pacificante aura aduersitatis alicuius timenda nulla remanebit’; cf. Bede, *In Lucam* 3.9 (ed. Hurst, CCSL 120, 206); *In Marcum* 3.9 (ed. Hurst, CCSL 120, 544).
71 Bede, *DDI* 130–4 (ed. Fraipont, CCSL 122, 443; trans. Allen and Calder, 211, modified): ‘Non sitis, esuries, non somnus, non labor ullus, / Non febres, morbi, clades, non frigora, flammae, / Taedia, tristitiae, curae, tormenta, ruinae, / Fulmina, nimbus, hiems, tonitrus, nix, grando, procellae, / Angor, paupertas, moeror, mors, casus, egestas’.
72 Bede, *DDI* 135–7 (ed. Fraipont, CCSL 122, 443–4; trans. Allen and Calder, 211–12, modified): ‘Sed pax et pietas, bonitas, opulentia regnat; / Gaudia, laetitiae, uirtus, lux, uita perennis, / Gloria, laus, requies, honor et concordia dulcis’.
73 Bede, *DDI* 94–5 (ed. Fraipont, CCSL 122, 442): ‘Ignibus aeternae nigris loca plena gehennae, / Frigora mixta simul feruentibus algida flammis’.
74 Bede, *DDI* 103; 105 (ed. Fraipont, CCSL 122, 442–3; trans. Allen and Calder, 211).
75 Bede, *EA* 3.36 (ed. Gryson, CCSL 121A, 514; trans. Wallis, 257): ‘Peracto quippe iudicio esse desinunt caelum et terra, cum incipit esse caelum nouum et terra noua, mutatione scilicet rerum non omnimodo interiturarum. Praeterit enim figura huius mundi, non dixit “et substantia”. Eadem namque in melius commutanda esse creditur’.
76 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 540).
77 Augustine, *DCD* 20.16 (ed. Dombart and Kalb, CCSL 48, 443).
78 On Augustine’s ideas in this regard, see Alfeche, ‘The Coming of the New Cosmos’, 15–19; T.E. Clarke, ‘St. Augustine and Cosmic Redemption’, *Theological Studies* 19 (1958), 133–64, at 159–63.
79 This distinction can be difficult to pick up on in modern translations of *De ciuitate Dei*, which often translate *mundus* as ‘world’ and therefore invite a reading which equates *mundus* with *terra*; the *mundus* however was the entirety of the physical universe: cf. J. Puhvel, ‘The Origins of Greek *Kosmos* and Latin *Mundus*’, *The American Journal of Philology* 97 (1976), 154–67, at 163.

80 Augustine originally accepted the Platonic idea of the ascent of the soul at death, but later came to accept the resurrection of the body—he would describe the resurrected bodies as 'aetherial', but I am not certain, contra O'Neill, '*aequales angelis sunt*', 9, that he was equating this form with the element of fire.
81 This is a quotation from Revelation, not from any of the books of the prophets. Bede seems to have been thinking of Jeremiah 25:10: 'And I will take away … the light of the lamp'.
82 Bede, *In epistulas septem catholicas* 3.3 (ed. Hurst, CCSL 121, 279–80).
83 Bede, *DTR* 70 (ed. Jones, CCSL 123B, 540): 'Vtrum maximo illo ardore siccetur mare an et ipsum uertatur in melius, non facile patet'; Bede, *EA* 3.36 (ed. Gryson, CCSL 121A, 519): 'utrum maximo illo ardore siccetur, an et ipsum uertatur in melius, non facile dixerim'; Augustine *DCD* 20.16 (ed. Dombart and Kalb, CCSL 48, 443); Primasius, *In Apocalypsin* 5.21 (ed. Adams, CCSL 92, 285).
84 Bede, *HA* 14 (ed. Grocock and Wood, 52).
85 See above, 231 n9.
86 According to Methodius, *De resurrectione* 2.30.8 (ed. Bonwetsch, 388).
87 *Glossa Ordinaria* 2 Pet 3:10 (ed. Rusch, vol. 4); Alexander of Hales, *Quaestiones disputatae, Appendix I: Aliae reportationes, redactiones, abbreuiationes* 3.3 (studio et cura PP. Collegii S. Bonaventurae 1960 (Bibliotheca Franciscana Scholastica Medii Aevi, tom. XXI), 1376).
88 Bede, *DTR* 71 (ed. Jones, CCSL 123B, 542). On Augustine's understanding, see F. Van Fleteren, 'Augustine and *Corpus Spirituale*', *Augustinian Studies* 38 (2007), 333–52.
89 This was the heresy proposed by Eutychius and quashed by Gregory the Great; Bede, *HE* 2.1 (ed. Lapidge, SC 489, 276); cf. Gregory, *Moralia* 14.56.72–3 (ed. Adriaen, CCSL 143A, 743–4); Darby, *End of Time*, 135–6.
90 Bede, *HE* 2.1 (ed. Lapidge, SC 489, 276; trans. Colgrave and Mynors, 126–7).
91 Bede, *EA* 3.36 (ed. Gryson, CCSL 121A, 520; trans. Wallis, 260): 'nulla remaneant uestigia uetustatis, quando quidem et corpora caelestis incorruptio sublimabit'.
92 Bede, *EA* 3.37 (ed. Gryson, CCSL 121A, 567).
93 Above, 134 and 142.
94 Bede, *Hom*. 2.3 (ed. Hurst, CCSL 122, 205); cf. Bede, *In Luc*. 4.15 (ed. Hurst, CCSL 120, 287); Haines, 'Vacancies in Heaven: The Doctrine of Replacement and *Genesis A*', *Notes and Queries* 44 (1997), 150–4, at 152; cf. Sowerby, 29–33, 36–7, 38–9, 41–4.
95 Bede, *IESC* 2.3.21–2 (ed. Hurst, CCSL 121, 251; trans. Hurst, 106): 'quo modo solet flamma ignis immissam sibi aquae guttam ardoris sui consumere uirtute'.
96 Bede, *In Lucam* 6.24.41 (ed. Hurst, CCSL 120, 420–1); cf. Augustine, *Ep*. 102.6 (ed. Goldbacher, CSEL 34.2, 549).
97 It is telling that Aelfric assumed that Bede's descriptions of the resurrected Christ and of the angels at Mamre were describing more or less the same thing. He borrowed from both discussions to formulate his own discourse on Christ's eating: Aelfric, *Hom*. 21 (ed. Clemoes, 346); cf. J.E. Cross, 'More Sources for Two of Aelfric's *Catholic Homilies*' *Anglia* 86 (1968), 59–78, at 69–70.
98 Bede, *De tabernaculo* 1.25 (ed. Hurst, CCSL 119A, 18; trans. Holder, 18): 'angeli … quasi leui uolatu ubique discurrere posse signentur neque ullam habere tarditatem quin confestim ubicumque uoluerint adsint'; cf. Isidore, *Etymologiae* 7.5.3 (ed. Lindsay).
99 Bede, *De tabernaculo* 1.25 (ed. Hurst, CCSL 119A, 18; trans. Holder, 18): 'Post resurrectionem quoque hoc ipsum nobis spiritali iam corpore uestitis indubitanter promittitur'.
100 Bede, *In Ez*. 3.1563–8 (ed. Hurst, CCSL 119A, 378).
101 See above, Chapter 5, 133–4.

9 Conclusion

Cosmology, physics and natural philosophy represent an area of enquiry that, at first glance, appears to have received short shrift in Bede's writing career. Bede, after all, only dedicated one text explicitly to this subject and that a short and early work that seems to bear little relation to the later, more complex texts for which he is feted. But Bede's cosmology is rather like the wallpaper: always in the background but easy to overlook. Cosmological reasoning runs through all of Bede's oeuvre—there is barely a work of his whose line of reasoning was not affected by notions such as elemental theory or the 'veins of the earth'.

Bede's ideas were hugely influential on the learning of the centuries immediately following his floruit.[1] A significant number of ninth-century commentaries on *De natura rerum* survive, attesting to a considerable interest in Bede's physics in Carolingian monasteries.[2] This period, however, also saw the rediscovery or reassimilation of texts unknown to Bede, such as Martianus Capella's *De nuptiis Philologiae et Mercurii* and Macrobius's *Commentarii in Somnium Scipionis*,[3] works which transmitted to Carolingian readers a more classical Platonic view of the cosmos that must have made Bede's makeshift model seem rather idiosyncratic and perhaps even provincial. As the centuries progressed, *De natura rerum*'s perceived utility began to wane, though manuscript copies never stopped being produced.[4] Bede's cosmological thought lived on instead in smaller moments of speculation and cosmological problem-solving harvested from his other works. Many of his opinions on the topography of the earthly paradise, the nature of hell, the bodies of angels and the mechanics of the six-day creation made their way into the writings of later thinkers like Hrabanus Maurus,[5] or to the hugely important and influential collection of medieval exegetical notes, the *Glossa ordinaria*,[6] and from there to Peter Lombard's *Sententiae*.[7] The *Sententiae* would provide the basis for commentaries by thirteenth-century theologians who,[8] armed with Aristotelian and Scholastic axioms quite distinct from Bede's starting principles, often brushed the earlier writer's carefully considered solutions quietly aside or modified them significantly.[9] Yet twelfth-century Aristotelianism also seems to have provoked a renewed interest in *De natura rerum*: manuscript production spiked,[10] and the text

was quoted with approval by thinkers like Robert Grosseteste.[11] Bede's reputation as a naturalist and critical thinker fluctuated over the following centuries. Roger Bacon admired him[12]; in the sixteenth century some saw him as the epitome of the credulous churchman and accused him of having 'set down certain miracles vulgarly reported and credited, which the Criticks of our Age will believe to be uncertain'.[13] Yet his opinions continued to be brought up and debated by scientists and naturalists, even though the original cosmological context in which they had been postulated had been left behind and even though Bede's name was often no longer associated with them. I detect faint echoes of Bede's theories in early modern debates about, for instance, angels and the earthly paradise.[14] In the nineteenth and twentieth centuries, Bede was rehabilitated and lauded for his 'scientific spirit'. But, as I argued in Chapter 1, this interest in Bede as scientist resulted in a fragmented presentation of Bede's thought; scholars picked out moments of observational 'science' but had little interest in tracing their place in the wider context of Bede's understanding.

How ought we instead to characterize Bede? Science, defined as the systematic application of the scientific method,[15] was almost a millennium away from being born at the time when Bede was active,[16] and I have argued against use of the term 'scientist' to describe Bede due to its anachronistic connotations. But in the history of those knowledge systems that preceded modern science—and which potentially have much to tell us about what science is and is not—Bede's writings can be enlightening. If Bede ought not to be considered a scientist what ought we to make of the fact that he seems to deduce from experiment and observation, as Eckenrode and Stevens contend? David Wootton, in an important recent study of the scientific revolution, has noted that 'there is nothing new about the idea of testing a theory'.[17] Indeed, we find many of Bede's most important intellectual forebears measuring ideas against experience.[18] But, as David Lindberg has remarked, 'observational evidence, though regularly employed in the validation of theoretical claims during the medieval period, had a profile considerably lower than in modern science'.[19] What was new about the 'new science' of the seventeenth century was 'the assumption that there are new discoveries to be made'.[20] As the cosmological models of ancient authorities were called into question, 'experience' and 'experiment' emerged as the most important measures of truth (the two words were at first synonymous and only gradually began to develop separate meanings).[21] It was with this shift in attitude that experiment/experience 'stopped being something that accorded with the statements of previous authorities and became a caustic solvent of fabulous beliefs'.[22] Of course, there existed in the early middle ages the possibility of exploding received knowledge through appeal to first-hand experience. It made sense for Bede to search for the answers to some question in his own experience. But the central difference between these actions and 'experiments' in the modern sense is that Bede lacked the framework of modern scientific enquiry. Bede would have had no problem with the

idea that he could discover some new information through observation and experience, but the notion that the entire edifice of traditional cosmology—from elemental theory to the geocentric universe to humoral theory—was founded on quicksand would have been much harder to stomach.

This leads me to an important point regarding medieval cosmology that is not always recognized. This is that the schema of the universe inherited by Bede from antiquity was an extremely robust interpretative tool. Elemental theory, for instance, was an elegant and pleasingly simple system—adaptable, flexible and capable of accounting for almost any natural phenomena.[23] The movement of the sun and moon forecast by the geocentric model was more accurate than we might expect—in fact, other theories of solar and lunar motion were 'no more economical, fruitful, or precise' than the geocentric model and were 'a great deal harder to believe'.[24] It is not the case—as a simplistic model of cultural progress would have it—that Bede and his contemporaries simply lacked the reason that would dispel the miraculous and marvellous from their worldview, that they believed in the supernatural because their thinking was irrational. Indeed, before the invention of the telescope, it is difficult to see what observational undertakings the medieval philosopher might have carried out that could have shown them the error of their cosmology.[25] I want to be clear: my argument is not that Bede's cosmology was entirely and consistently rational or even that it was necessarily the most rational possible given the circumstances. Humans of all eras and cultures are guided by a number of factors, not always rational, and 'irrationality' is in any case difficult to distinguish from rational thinking built on faulty premises.[26] But the notion that the medieval worldview was a kind of castle made of sand that would crumble at the first interrogation by an independent-minded truth-seeker is erroneous. In making this argument, I am not seeking to collapse the distinction between medieval approaches to knowledge and modern science—the differences between the former and the latter are simply more subtle than we might think. But if we assume—as I think we must—that rationality is not synonymous with modernity,[27] then Bede stands as a good example of someone who, by approaching the cosmos as a rational system, was able to build through a series of logical steps an edifice of naturalistic understanding based on a handful of fundamental axioms. To call this 'science' is, I believe, misleading but nor is it the imagined opposite of science in the simplistic dichotomy of the myth of progress—irrationality, faith, unreason.

What is perhaps most striking about Bede's cosmic vision is its neatness. Bede left the cosmos a more orderly place than it was when he found it: in his vision, events such as the final conflagration served a clear and coherent function. This speaks to a fundamental aspect of Bede's approach to gaining knowledge about the world: he assumed that there was a lean and logical economy to the cosmos that allowed for humans to deduce certain things not written about in Scripture. Medieval naturalists are sometimes accused of privileging the information they found in their books over observation of

the world around them. There is more than a little truth to this statement. But it would not have seemed so to them. Bede could draw equally from Scripture, from classical science and from his own observation of the natural world because—and this is key—he had no reason to believe that these sources would contradict each other in any major way. Two basic assumptions underlie Bede's methodology. Firstly, he was convinced of the unity of Scripture. His 'concordance exegesis' approach was predicated on the assumption that any part of Scripture should and could shed light on other parts. Secondly, Bede apprehended a further level of concordance—he understood that the words of Scripture were in perfect agreement with those undeniable facts of reality that were accepted by him as a matter of course. Bede *knew* that the world was formed of the four elements, that there were bodies and there were spirits and that the earth lay at the centre of a layered, spherical cosmos—and he assumed that the divinely guided authors of Scripture knew that too. He believed that any references to 'earth', 'fire', 'air' or 'water' in the Bible were written with the theory of the elements in mind; that references to the earth and the heavens were made in the full knowledge of the layered spheres of the Neoplatonic cosmological model; and that references to sudden floods or earth tremors could be explained with recourse to the Plinian notion of the 'veins of the earth'. Bede was therefore able to go far beyond the letter of Scripture in a way that, to our eyes, used to the idea of reading the books of the Bible in their culturally specific contexts, seems perilous. But for Bede, there was no problem in this—indeed, this assumption was the foundation of his system of knowledge. Of course, such an approach threw up incongruities. The books of the Bible were not written (for the most part) with Graeco-Roman cosmological ideas in mind, and indeed the books of the Bible contained many internal inconsistencies. Despite the doctrinal assumption that one should place the words of Scripture above the fruits of human enquiry, the opposite often happened. Without a doubt, the original compilers of the Book of Genesis would have been quite surprised at Bede's interpretation of what had occurred during the six days of creation.

Bede's contribution to the learned culture of the middle ages has often been seen as less than it was, his writings dismissed as mere syntheses of what came before. This may well stem from his own rhetorical protestations of unoriginality—after all, he modestly portrays himself as having spent his career endeavouring 'to make brief extracts from the works of the venerable fathers on the holy Scriptures, or to add notes of my own to clarify their sense and interpretation'.[28] Caught between this characterization and unfair modern expectations of the shape of rationality, it is no wonder that Bede's ideas about the cosmos have rarely been explored. But, as I hope I have shown, his additions to received wisdom were substantial and his explorations of the natural world were admirably imaginative and intelligent. His cosmos was not an accurate representation by any standards, built as it was on assumptions that we no longer recognize as axiomatic, but it was a

resonant and dynamic model and it reflects a human capacity for investigation and explanation that belongs to the early middle ages just as much as any other period of history.

Notes

1 On Bede's influence on later generations, see J.A. Westgard, 'Bede and the Continent in the Carolingian Age and Beyond', in S. DeGregorio (ed.), *The Cambridge Companion to Bede* (Cambridge, 2010), 201–15; Brown, *A Companion to Bede*, 117–34; D. Whitelock, *After Bede*, Jarrow Lecture (Jarrow, 1960), repr. in M. Lapidge (ed.), *Bede and his World: The Jarrow Lectures, 1979–93*, 2 vols. (1994), I, 37–49. For the influence of Bede's cosmological thought in particular, see J.J. Contreni, 'Bede's Scientific Works in the Carolingian Age', in Lebecq, Perrin and Szerwiniack (eds), *Bède le Vénérable*, 247–59.

2 F.R. Lipp, 'The Carolingian Commentaries on Bede's *De Natura Rerum*', Yale University (1961); J.J. Contreni, 'John Scottus and Bede', in J. McEvoy and M. Dunne (eds), *History and Eschatology in John Scottus Eriugena and his Time* (Leuven, 2002), 91–140', repr. in his *Learning and Culture in Carolingian Europe*, Variorum Collected Studies (Farnham, Surrey, 2011), no. V; J.J. Contreni, 'Bede's Scientific Works in the Carolingian Age', in Lebecq, Perrin and Szerwiniack (eds), *Bède le Vénérable*, 247–59, repr. in his *Learning and Culture in Carolingian Europe*, no. IV.

3 M. Teeuwen and S. O'Sullivan (eds), *Carolingian Scholarship and Martianus Capella: Ninth-Century Commentary Traditions on De nuptiis in Context* (Turnhout, 2011); B. Eastwood, *Ordering the Heavens: Roman Astronomy and Cosmology in the Carolingian Renaissance* (Leiden, 2007), 31–94.

4 Westgard, 'Bede and the Continent', 211.

5 As is clear from the citations in W. Stevens (ed.), *Rabani Mogontiacensis Episcopi De computo*, CCSL 44 (Turnhout, 1979); for a recent introduction to Hrabanus Maurus, see P. Depreux, S. Lebecq, M.J.-L. Perrin and O. Szerwiniack (eds), *Raban Maur et son temps* (Turnhout, 2010).

6 M. Gibson, 'The Glossed Bible', in K. Froehlich and M. Gibson (eds), *Biblia latina cum glossa ordinaria* (Turnhout, 1992); E.A. Matter, 'The Church Fathers and the *Glossa Ordinaria*', in I. Backus (ed.), *The Reception of the Church Fathers in the West* (Leiden, 1997), 83–111; see now the very useful study of C. Berinyuy Sengka, *The Relevance of St Bede the Venerable to the Glossa Ordinaria: An Analytical Critique* (Rome, 2018).

7 On Peter Lombard, see M. Colish, *Peter Lombard*, 2 vols. (Leiden, 1994); P.W. Rosemann, *Peter Lombard* (Oxford, 2004).

8 On this tradition see G.R. Evans and P.W. Rosemann (eds), *Mediaeval Commentaries on the Sentences of Peter Lombard*, 3 vols. (Leiden, 2002–15).

9 For examples, see above, 142–3 (angels burning food), 229 (fire and water being absent), 119 n62 (food not being digested).

10 Westgard, 'Bede and the Continent', 211.

11 Robert Grosseteste, *Hex*. 1.16.1 (ed. Dales and Gieben, 73).

12 B. Smalley, *The Study of the Bible in the Middle Ages*, 3rd ed (Oxford, 1983), 35.

13 Quoted in B. Southgate, 'Blackloism and Tradition: From Theological Certainty to Historiographical Doubt', *Journal of the History of Ideas* 61 (2000), 97–114, at 109.

14 See the references at 150 n149 and 89 n139.

15 I have defined 'science' accordingly throughout this book in order to make a clear distinction between Bede's thought and modern paradigms. Other scholars have felt differently (cf. D.C. Lindberg, 'The Medieval Church Encounters the Classical Tradition: Saint Augustine, Roger Bacon, and the Handmaiden

Metaphor', in D.C. Lindberg and R.L. Numbers (eds), *When Science and Christianity Meet* (Chicago, 2003), 7–32, at 9–10) and a more expansive definition, as in for instance J.E. McClellan III and H. Dorn, *Science and Technology in World History: An Introduction*, 2nd ed (Baltimore, MD, 2006), is by no means invalid.

16 The scientific revolution has been the subject of much scholarly debate. Classic works in the field are: Butterfield, *The Origins of Modern Science* (London, 1950); T.S. Kuhn, *The Copernican Revolution: Planetary Astronomy in the Development of Western Thought* (Cambridge, MA, 1957); T.S. Kuhn, *The Structure of Scientific Revolutions* (Chicago, 1962). For recent re-appraisals, see D.C. Lindberg and R. Westman (eds), *Reappraisals of the Scientific Revolution* (Cambridge, 1990); S. Shapin, *The Scientific Revolution* (Chicago, 1996); P. Dear, *Revolutionizing the Sciences: European Knowledge and Its Ambitions, 1500–1700*, 2nd ed. (Princeton, NJ, 2009); H.F. Cohen, *How Modern Science Came into the World: Four Civilizations, One 17th-Century Breakthrough* (Amsterdam, 2010); D. Wootton, *The Invention of Science*.

17 Wootton, *Invention of Science*, 318.

18 For instance, Augustine's experiment with the peacock flesh as recounted in *DCD* 21.4 (ed. Dombart and Kalb, CCSL 48, 492); and Basil and Ambrose's observations about the natural world in their Hexaemera (see above, 65–6). Cf. K. Park, 'Observation in the Margins, 500–1500', in L. Daston and E. Lunbeck (eds), *Histories of Scientific Observation* (Chicago, 2011), 15–44.

19 Lindberg, 'The Medieval Church Encounters the Classical Tradition', 9.

20 Wootton, *Invention of Science*, 61. The novelty of early modern scientific enquiry was recognized and celebrated by its practitioners. A central part of the 'new philosophy' of these thinkers was the knowledge that they were engaged in a project to upend centuries of thought. See Shapin, *The Scientific Revolution*, 65–8.

21 C.B. Schmitt, 'Experience and Experiment: A Comparison of Zabarella's View With Galileo's in *De Motu*', *Studies in the Renaissance* 16 (1969), 80–138.

22 Wootton, *Invention of Science*, 270.

23 For some of the ways in which elemental theory was used to explain everyday processes in the middle ages, see R. Jones, 'Elemental Theory in Everyday Practice: Food Disposal in the Later Medieval English Countryside', in J. Klápšte and P. Sommer (eds), *Food in the Medieval Rural Environment: Processing, Storage, Distribution of Food* (Turnhout, 2011), 145–54; R. Jones, 'Understanding Medieval Manure', in R. Jones (ed.), *Manure Matters: Historical, Archaeological and Ethnographic Perspectives* (London, 2012), 145–58, at 149–52.

24 Kuhn, *The Copernican Revolution*, 43. It should be noted that Bede's planetary model was relatively unsophisticated. He did not have access to the complex formulae of Ptolemy. The incongruous movements of the planets were a headache for medieval astronomers. As Kuhn noted: 'if the sun and stars were the only celestial bodies visible to the naked eye, modern man might still accept the fundamental tenets of the two-sphere universe'. Note too the opinion of Charles W. Jones, 'Didascalica Genuina', 31: 'Needless to say, granted the theoretical base upon which computists worked before the introduction of the astrolabe, Bede's formula [of the moon's movements] is as accurate as it can be made'.

25 As a number of scholars have demonstrated, Copernicus's heliocentric theory did not have a higher rate of accuracy than the Ptolemaic system he sought to supplant; it was only with Galileo's telescopic observations that evidence against geocentrism began to pile up—until that point there was nothing to definitively recommend one theory over the other: Kuhn, *The Copernican Revolution*; D. J.de S. Price, 'Contra-Copernicus: A Critical Re-estimation of the Mathematical Planetary Theory of Ptolemy, Copernicus, and Kepler', in M. Clagett (ed.), *Critical Problems in the History of Science* (Madison, WI, 1959), 197–218; O. Gingerich, '"Crisis" Versus Aesthetic in the Copernican Revolution', in A. Beer and K.A. Strand (eds), *Copernicus Yesterday and Today* (Oxford, 1975), 85–93.

26 Hence the interest in recent years in the 'rationality' of pre-modern magic: see G.W. Dawes, 'The Rationality of Renaissance Magic', *Parergon* 30 (2013), 33–58; R. Kieckhefer, 'The Specific Rationality of Medieval Magic', *The American Historical Review* 99 (1994), 813–36. For a useful discussion of medieval rationalities, see D'Avray, *Medieval Religious Rationalities*.

27 As well as the works cited at 25 n76 above, see S.J. Tambiah, *Magic, Science and Religion and the Scope of Rationality* (Cambridge, 1990); J.Ā. Josephson-Storm, *The Myth of Disenchantment: Magic, Modernity, and the Birth of the Human Sciences* (Chicago, 2017).

28 Bede, *HE* 5.24 (ed. Lapidge, SC 491, 188; trans. Colgrave and Mynors 566): 'in scripturam sanctam … ex opusculis uenerabilium patrum breuiter adnotare, siue etiam ad formam sensus et interpretationis eorum superadicere'.

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